

CHAPTER 5.0 ISSUES AND IMPACTS

5.1 OVERVIEW

5.1.1 Environmental Review of the Burien Plan

The Burien Plan, originally adopted in November 1997, has evolved over time through a series of adopted updates to the community's existing conditions, policies, and maps that implement the Burien vision. The following list provides a summary of the SEPA documentation prepared through December 2003 that evaluates potential impacts of the Burien Plan and adopted amendments to it:

- City of Burien Comprehensive Plan Draft and Final Environmental Impact Statement (EIS) (October 1997);
- Final EIS Addendum on Burien Plan Amendments (November 20, 1997);
- Environmental Checklist/DNS on the Comprehensive Plan and Zoning Amendment for the Manhattan Woodside Park Annexation (September 4, 1998);
- Environmental Checklist/DNS on the Comprehensive Plan Amendments related to the SeaTac Airport Expansion. Amendments are in response to a challenge filed with the Growth Hearings Board by the Port of Seattle (April 8, 1998) (refer to discussion in Section 5.3);
- Environmental Checklist/DNS on the Comprehensive Plan and Zoning Code Amendments related to the Minimum Lot Size and Width Required for Development or Redevelopment of Existing Legally Platted Lots in Residential (R) Zones (October 20, 1998);
- Environmental Checklist/DS on an Amendment to the Comprehensive Plan by adding the State Adopted LOS for SR 509 and 518 (LOS D) (October 23, 2000);
- Final EIS Addendum on Burien Plan Amendments (January 7, 1999);
- Final EIS Addendum on Burien Plan Amendments (January 7, 1999);
- Northeast Special Planning Area (SPA-4) Draft and Final Supplemental EIS (November 2002); and
- City of Burien Comprehensive Plan Update Final EIS Addendum (November 13, 2003).

This chapter contains three separate sections which include excerpts of the environmental review and analysis for Burien's first Comprehensive Plan and each subsequent major amendment. The first Section (Sec. 5.2), is the original 1997 City of Burien Comprehensive Plan Draft EIS (October 1997). The second Section (Sec. 5.3), analyses the Comprehensive Plan Amendments related to the SeaTac Airport Expansion (April 1998). The third and most recent section (Sec. 5.4), is the 2003 City of Burien Comprehensive Plan update Final EIS Addendum (November 2003). Proposed Planning Commission recommendations, public, and agency comments associated with the environmental impacts of all of these documents are retained on file with the City and are available for review upon request.

5.2 1997 BURIEN PLAN ENVIRONMENTAL IMPACTS

The 1997 Burien Plan combines the evaluation of planning issues and alternatives with an analysis of the potential environmental impacts of a comprehensive plan for the City. As such, the Plan integrates comprehensive planning as required under the Growth Management Act (GMA) with environmental analysis required under the State Environmental Policy Act (SEPA). This section presents that integrated analysis of planning issues and potential impacts of the Plan on the existing conditions of the City, as described in Chapter IV.

5.2.1 The SEPA Review Process

The State Environmental Policy Act (SEPA) requires local governments to prepare an environmental impact statement (EIS) for any significant proposed action. The adoption of a new comprehensive plan by the City Council is such a “proposed action.” The purpose of this EIS is to compare and analyze the general impacts upon the environment from the different land use alternatives being considered for Burien’s Comprehensive Plan.

Local governments may evaluate proposed actions under SEPA in several different contexts. The City has chosen to conduct an environmental review of the comprehensive plan in conjunction with the development of the plan. Under this *integrated approach* (combining the SEPA review and comprehensive planning process), the comprehensive plan alternatives serve as the alternatives evaluated under SEPA.¹

One of the advantages of integrating the SEPA analysis with the development of the plan is that this approach allows the consideration of the environmental implications to occur alongside the consideration of land use choices and alternatives. Thus, the “preferred land use alternative” is developed by responding to the environmental implications of a broad range of policy and land use choices, and evaluating potential alternatives to these scenarios.

Environmental analysis of plans or programs, such as the City’s comprehensive plan, are referred to as “programmatic environmental review.” If the program or plan has potential environmental impacts, a “programmatic” Environmental Impact Statement (EIS) may be needed. In contrast, “project environmental review” considers specific environmental impacts of individual projects or developments permitted by the plan. This type of analysis, also known as “project review,” occurs later as specific development proposals arise. If additional environmental impacts are identified at the project review stage, then a project-level EIS might be required. The process of reviewing the environmental impacts at the more macro level planning stage (programmatic review) and later when a specific development is proposed (project review), is known as “phased review.”

¹ As provided under WAC 197-11-235.

“Phased review” allows for the appropriate level of analysis at the appropriate time. Programmatic analysis best addresses the cumulative impacts of all anticipated development. Programmatic analysis also allows identification of appropriate policy measures to apply at the project design stage to reduce potential impacts. Good programmatic analysis combines the ability to resolve cumulative impact issues and identifying appropriate mitigating policies.

In comprehensive planning, effective programmatic planning can substantially reduce the need for requiring a full EIS on individual projects. Cumulative impacts usually can not be assessed or may be overlooked at the project level. It is these cumulative impacts that often result in requiring an EIS at the project stage if they are not identified earlier during the programmatic review.

5.2.2 Burien’s Approach²

The requirements of SEPA were fulfilled by The Proposed Comprehensive Plan: Planning Commission Recommendations that also serves as the Final EIS on the plan. The Proposed Comprehensive Plan: Planning Commission Recommendations also includes the responses to public comment given during the Planning Commission Hearings. Amendments to the plan made by the City Council were reviewed for consistency with the analysis contained herein. The responsible official determined that no additional analysis of impacts was required. The Planning Commission Hearing Draft of the Plan, issued in April of 1997, incorporated the Draft EIS. Chapters IV and V, as published in this edition of the comprehensive plan, restate the analysis contained in the final EIS.

The analysis contained in this 1997 edition of the plan is largely similar to the Draft EIS analysis prepared in the Planning Commission Hearing Draft of the Plan. It differs in three ways.

- First it incorporates the changes that the Planning Commission and City Council made in the plan. In environmental analysis terms, these actions may be considered mitigation to the earlier draft made in response to public comments on some potential adverse impacts. For example the Planning Commission increased density in almost a square mile of residential areas in response to comments regarding the potential adverse impact of the plan on housing. This analysis also incorporates changes made by the City Council in multiple family zoning.
- Second the additional analysis has been added where public discussion indicated more analysis was appropriate. These included expanding the analysis of affordable housing, adding more information on traffic forecasts, providing a “balance sheet” of

² This section has been edited in this edition of the plan, after the City Council’s adoption of Chapter V of the Planning Commission Recommended plan. The edits reflect the status of the environmental review after council action. The reader should refer to Volume II of The Proposed Comprehensive Plan: Planning Commission Recommendations for the original council action on the plan.

expenditures and revenues needed to implement the plan, and an analysis of the implications of the Port of Seattle's plans to add a third runway to SeaTac Airport.

- Third errors and inconsistencies were found and corrected. The most significant of these changes is an improved analysis of housing capacity. In the earlier draft of the plan, multiple family capacity estimates were developed using generalized factors and was not parcel specific due to time and data limitations. Now a complete data base of parcel specific land use changes under the plan has been prepared. This has made a much more precise estimate of housing capacity for the plan possible. This precision has resulted in a somewhat lower number of potential multiple family units than previously published. While this may appear to be a change in the content of the plan, it is not. It is a revised estimate of the plan's impact based on more accurate information. The planning commission made no significant changes in multiple family designations since the last draft.

The description of the planning area and background information for the plan in Section I serve as the analysis of existing conditions. Section II presents both a summary and environmental review of the alternatives considered as a part of the comprehensive planning process.

As part of its comprehensive planning process, Burien considered three alternatives that express different choices the community can make for its future. SEPA also requires consideration of a fourth land use alternative, the "No Action Alternative." For Burien, the fourth alternative comprised the existing 1994 Interim Zoning Map. The design of the planning alternatives provided a basis for considering the environmental implications of the actions, as well as comparing and contrasting the plan's land use issues.

The "Burien Vision," a compilation of ten statements that express the community's vision of the City in the future, provided the basis for the development of each of the alternatives. In November 1995, the City held a series of community meetings to gather ideas on how the Burien could be achieved. At these meetings, the community learned that the Burien Vision can mean many different things to different people.

Consequently, each alternative places a different emphasis upon certain Vision statements to capture the different choices the community has identified for interpreting the Vision. These choices affect the way each alternative accommodates growth and development, resulting in significant differences in the way each alternative addresses land use, housing, transportation, public safety, utilities, parks, recreation and open space, storm water, human resources, economic development, and capital facilities and services.

After hearing extensive public comment, the "preferred future land use alternative" was developed and recommended by the Planning Commission.

The city comprehensive plan when adopted by the city council will be the Preferred Alternative. By combining the planning process and the environmental analysis of the alternatives, the proposed plan serves to mitigate many of the potential impacts of the plan on the environment.

5.2.3 Summary of Opportunities and Constraints

The planning alternatives were devised to reflect and respond to the opportunities and constraints that confront the future development of the city. These basis of opportunities and constraints are described in detail in Section II of this plan.

Constraints include environmentally sensitive areas, such as areas susceptible to landslides, or areas deficient in the types of services necessary for more urban levels of development, such as sewer or water. It should be noted that while constraints are traditionally viewed as limiting or restricting development, they could also be turned around and viewed as opportunities for preserving the existing character of an area, whether it be as open space or low density development.

Opportunities take on many different faces within the City. For example, opportunities can be found to preserve and enhance existing parks and open space, to enhance the character of our built environment, such as in the downtown core, or to reconfigure the transportation network to improve the flow of traffic.

Figure 5.2-1 depicts the location of significant constraints and Figure 5.2-2 the opportunities within the City of Burien. (Please note that these maps summarize constraints and opportunities within the City, and consequently are to be used only for illustration purposes.)

5.2.4 Environmentally Sensitive Areas

Within Burien, environmentally sensitive areas that can be seen as potential limitations to development include areas where the underlying geology, soils and topography create hazardous conditions for development, and areas where the City's and region's water resources are susceptible to degradation from development

Landslide Hazard Areas

It is generally regarded that special care must be taken when building on steep slopes. The Soil Conservation Service of the U.S. Department of Agriculture reports that most soils on 15 to 40 percent slopes can be potential erosion and landslide hazards. Consequently, slopes greater than 40 percent are rarely built on. Many sources advise against any development on slopes of more than 25 percent, unless it is highly regulated and engineered. The proposed plan maintains the current regulatory system that strictly controls new development on slopes in excess of 40% or on known landslide hazard areas less than 40%.

Within the City, landslide hazard areas are defined as having slopes steeper than 15 percent which are underlain by impermeable soils, such as silt and clay, and mixed with relatively permeable soils consisting largely of sand and gravel. These problems are exacerbated by the presence of springs or ground water seepage. These areas are generally stable under natural slope conditions but are subject to stability problems

resulting from land use activities. The apparent stability of these slopes can be deceptive: their potential instability might be obscured and the necessity for special regulation of land developments might not be apparent.

Soil erosion can be a significant problem in areas undergoing development. The removal of protective vegetative coverings from unstable soils during construction can expose soil particles to uncontrolled surface water runoff, wind, or gravitational forces. As runoff gains velocity, it detaches and carries away particles, and cuts rills and gullies into the soil. The impacts are usually seen in adjacent and downstream areas where the eroded soil reduces water quality and causes sedimentation in wetlands, streams, storm drainage facilities, and developed properties. Because of this, it is critical to require effective erosion control measures during clearing and development phases on sites that have been identified as prone to significant erosion and landslides. Special precautions, development standards, and best management practices should be instituted before development occurs in landslide hazard areas. In addition, development on openly steep slopes/unstable areas can be detrimental to human health, the sustainability of the environment, and property values.

The majority of the landslide hazard areas are located along the Puget Sound coastline, where soil types, steep slopes and ravines, spring fed creeks, and upland streams combine to create unstable lands. These areas include parts of Shorewood, Seahurst, Seahurst Park, Salmon Creek Ravine, and the Three Tree Point area. The slopes along these bluffs are steep to very steep, often exceeding 40 percent.

In contrast to these constraints, the majority of the City is characterized by gently rolling terrain, with elevations between 300 and 400 feet mean sea level (msl). The highest elevations are found in the northeastern part of the City. The upland areas drop abruptly from 300 feet msl to sea level along the Puget Sound shoreline bordering the City on the west.

Wetlands

Wetlands are transitional areas between upland and aquatic environments where water is present long enough to form distinct soils and where specialized "water loving" plants can grow. Wetlands include marshy areas along shorelines, inland swamps, and seasonal watercourses. Wetlands are typified by a water table that usually is at or near the surface, and there may be standing water all or part of the year. Wetlands provide erosion and sediment control -- the extensive root systems of wetland vegetation stabilize stream banks and shorelines. Wetlands also improve water quality by decreasing the velocity of water flow, resulting in the physical interception and filtering of waterborne sediments, excess nutrients, heavy metals, and other pollutants. Wetlands help in flood control, for when floodwaters overflow the banks of streams and rivers the porous soils and wetland plants soak up tremendous amounts of water which then seeps slowly back into streams. Wetlands also provide food and shelter, essential breeding, spawning, nesting and wintering habitats for fish and wildlife, including migratory birds, anadromous fish, and other commercial and recreational valuable species.

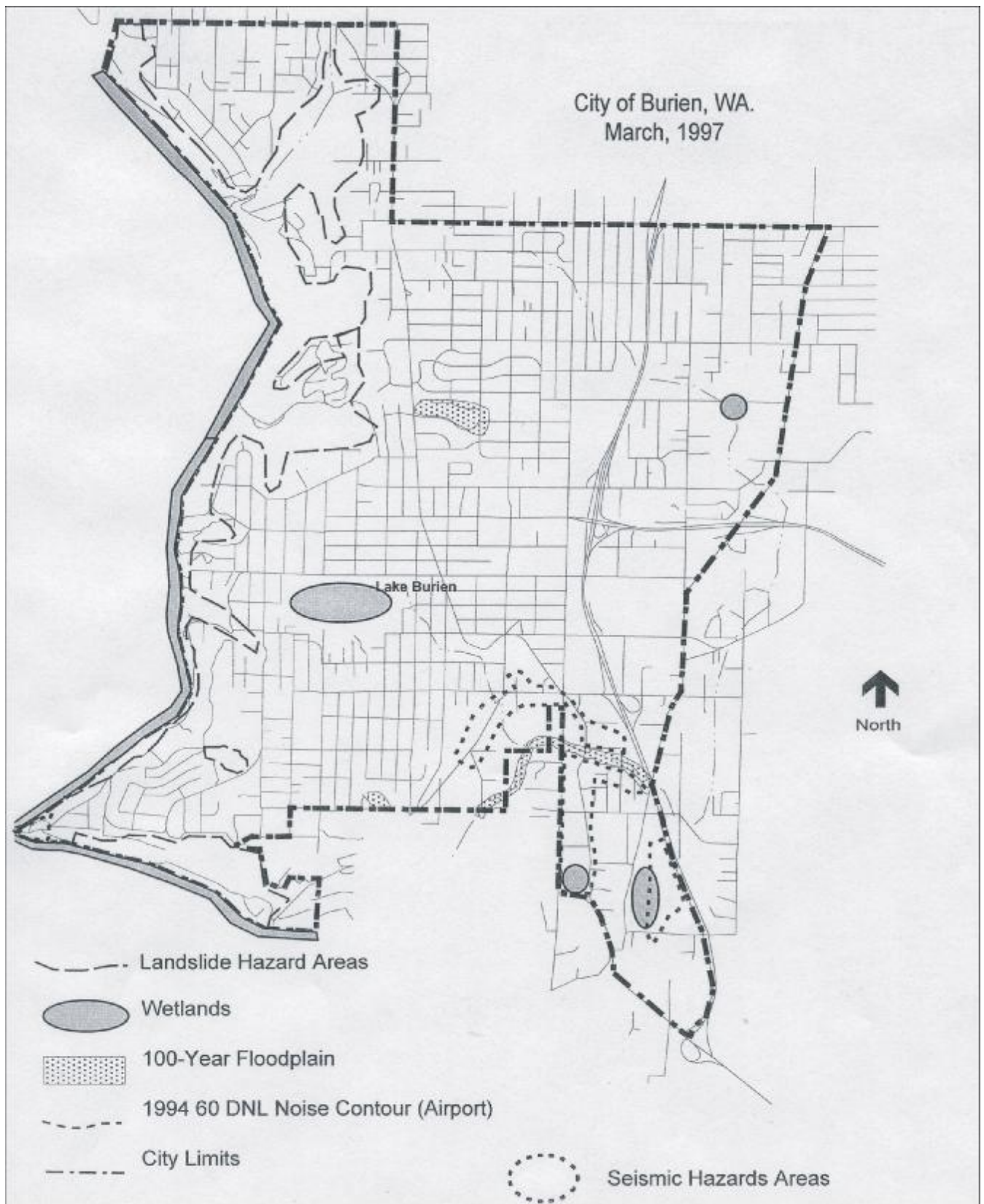


Figure 5.2-1 - Constraints

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map1.pdf

Back of Figure 5.2-1 Constraints

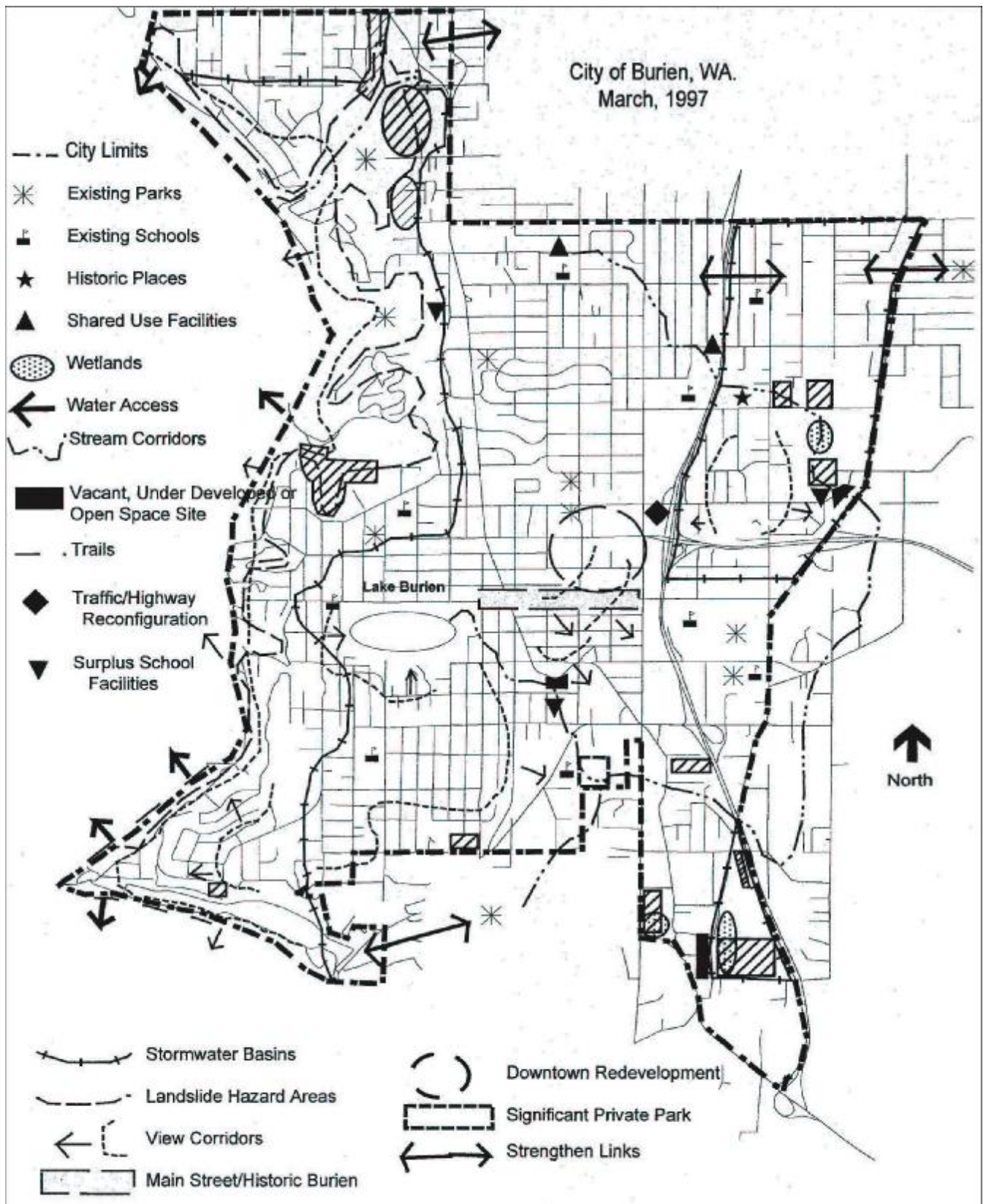


Figure 5.2-2 - Opportunities

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map2.pdf

Back of Figure 5.2-2 Opportunities

The City of Burien wetland resources includes two Class 2 wetlands³ in the southeastern area of the City, totaling approximately 26 acres. In addition, just north of the Highline School District Mental Health facilities, Miller Creek flows into an open body of water less than an acre in size and classified as a Class 2 wetland. Other significant wetland areas are found along Miller Creek. One particularly noteworthy area is located in the Miller Creek Ravine in the vicinity of 1st Avenue South and Ambaum. Puget Sound Beaches, along with adjacent creek mouths are considered particularly important wetland resources. The King County wetland inventory system also designates Lake Burien as a wetland

There may also be a number of other wetlands of smaller size located within the city. The City of Burien has adopted standards and requirements which allow only very limited development and activities in and adjacent to wetlands, while striving to preserve their integrity.

Stormwater Drainage Basins

The City of Burien is divided into seven drainage basins -- Seola Creek, Puget Sound (two basins), Salmon Creek, Hermes Depression, SW 142nd St. Depression, and Miller Creek. Most of the significant constraints to development are located in the Puget Sound drainage basins.

The Salmon Creek drainage basin originates in the City of Seattle, flows through the White Center area, and terminates in Puget Sound in the northwest corner of the City. Flows from this basin are attenuated somewhat by a series of degraded wetlands and small lakes, including Garret Lake, all of which are outside the City of Burien. At Ambaum Boulevard an old World War II pipeline diverts part of the flow entering the City directly to Puget Sound. This pipeline is undersized but does help to lessen the erosion and sliding that occurs in the steep portions of this basin due to uncontrolled runoff.

The Miller Creek drainage basin originates in numerous bogs, lakes, and depressions in the plateau area that makes up the bulk of the Burien-SeaTac land area. Miller Creek is formed through a system of seven tributaries. Miller Creek receives drainage from the Burien commercial area, State Highway 509, Sea-Tac Airport and an extensive area in King County. The main stem of Miller Creek is only partially in the City of Burien. Erosion, slides and loss of habitat are the principal problems associated with Miller Creek, and primarily occur south of Burien in the City of Normandy Park. Within Burien, there are a number of drainage problems associated with depression areas caused by the last glacial period, and by undersized pipelines and incomplete drainage systems.

³ The City of Burien Zoning Code (18.59.945 Wetlands) defines Class 2 wetlands as “including wetlands assigned the Significant #2 rating in the 1983 King County Wetlands Inventory or which meet any of the following criteria: a) are wetlands greater than one acre in size; b) are wetlands equal to or less than one acre in size and have three or more wetlands classes; c) are forested wetlands equal to or less than one acre but larger than 2,500 square feet; or d) are wetlands which have present heron rookeries or raptor nesting trees.”

The Puget Sound drainage basins include a series of small basins composed of steep hillsides sloping down from the Burien Plateau area to the Puget Sound. Each basin collects ground water outcroppings and urban runoff, and forms streams of varying sizes, some quite large as in Seahurst Park, and others intermittent spring-fed creeks. Increases in development and impervious surfaces within these basins, combined with the effects of uncontrolled runoff from development, has caused a number of serious erosion and slide problems in each of these basins.

Other areas contributing to stormwater drainage problems in the City are the major shopping areas downtown and along 1st Avenue South. Most of the central commercial area of Burien was developed before the advent of King County stormwater control ordinances.

Floodplains

A very small portion of the City is within designated 100-year floodplains. One is located just north of SW 142nd St. between Ambaum Blvd. and 6th Ave. SW. This area forms a natural drainage basin for the 142nd Street Depression Sub-basin, and experiences severe flooding during the winter months. The other 100-year floodplain is located in the southern part of the City, along the Miller Creek Corridor. Much of the corridor the Creek passes through in this area has not been developed, and includes a low-density residential neighborhood, the Kiwanis Park/Camp Schoenwald, and some ravine areas.

Aquifer Recharge Areas

The Highline Well Field serves as a smaller source of supply for the Seattle Water Department (SWD). The eastern half of the City is located in the aquifer's recharge area. In the unsewered portions of the northeastern part of the City, poor soils and a history of failing septic tanks create a high potential for groundwater contamination of this aquifer.

The aquifer recharge area needs to be protected in the design of the future land use alternatives. This could be accomplished through regulatory measures, such as downzoning the affected areas to keep the level of development low (which would stem the proliferation of septic tanks but not prevent the failure of existing ones) or by installing a sewer system.

5.2.5 Capital Facilities

Capital facility constraints include sewer, water, and transportation system deficiencies.

Sewer

While there is enough capacity within the sewer system to meet the future needs of the community, there are several unsewered areas within the City that pose constraints to development. These areas include Three Tree Point, Seahurst, parts of Shorewood, and the northeastern and southeastern parts of the City. Without sewer systems in place,

limited development can occur in these areas. If a sewer system is not implemented in these areas, downzoning becomes a possible response or alternative.

Water

There are six separate water purveyors for the City, including the Seattle Water Department (SWD). The most common current deficiency identified by the water districts involves replacing undersized distribution lines to improve fire flow. This is particularly true in portions of Districts 85, 20, and 49, and the Highline Water District in the Three Tree Point and 490 pressure zones. Until these improvements are actually implemented, development in these areas will be limited. The Highline Water District has identified a potential water supply shortage in the future that needs to be addressed. In some cases, the need for pipe replacements and other improvements in these areas has been identified and planned for in the near future. In other cases, such as in District No. 85 and the Seattle Water Service Area, no definitive plans are known.

Traffic

The amount of automobile traffic traveling between residential areas in the far western parts of the City along the Puget Sound coast is already perceived as an issue. Capacity deficiencies on existing roads, combined with a lack of east-west routes create congestion on the available routes and high volumes of traffic traveling through the adjacent residential neighborhoods. Streets in residential areas are generally constructed to a low rural level of service standard. Many of these streets, especially in the western part of the city are not appropriate to support urban levels of development. Most residential areas do not have sidewalks. These concerns would be intensified with additional residential development along the coastline.

Other major constraints include inadequate sight clearances are present on many of the city arterials creating potential safety and capacity concerns if higher intensity development occurs at these sites, and congestion at some of the city's major intersections especially at the interchange of SR509 and SR518.

5.2.6 Opportunities

Figure 5.2-2 presents an graphic display of all of the opportunities that will be summarized below. In addition there are several opportunities to promote the redevelopment of downtown.

Parks, Recreation, and Open Space

The following opportunities exist related to parks, and recreation:

- Preserving and enhancing existing parks, open space and recreation facilities. Many of the existing facilities are in need of maintenance and improvements.

- Sharing the use of facilities, such as stormwater drainage ponds and properties. Passive parks and walking trails could be added to these sites at minimal cost, while still maintaining the basic function of these facilities.
- There is an opportunity to create a network of designated walking routes to connect parks, open spaces, and recreation areas with other activity areas in the City, including neighborhoods, schools, shopping areas, the transit center, and the downtown core. These routes could be differentiated from other sidewalks or routes by a variety of methods, including planting trees to form a greenway on certain streets or using a different paving for sidewalks. Existing trails within the City, such as the Indian Trail, could also be incorporated into the network.
- Surplus school facilities could be purchased for use by the City. Currently top on the list for surplus within the City of Burien are the Highline Senior Center, Lakeview School (existing school district museum and field), and Sunny Terrace School (no longer in operation).
- There are a number of large, vacant parcels of land located throughout the City. These parcels could be considered for a variety of activities.

View Corridors

The hilltops in Burien provide views of Mount Rainier, the Olympic and Cascade Mountains, and the Puget Sound. There are opportunities for preserving these public views and/or building developments which capitalize upon the view. In addition the sensitive areas along the coast offer outstanding waterfront and Puget Sound view values.

Environmentally Sensitive Lands

Environmentally sensitive areas, as discussed earlier, include wetlands, steep slopes, and aquifer recharge areas. While seen as constraints to development, these lands can also be considered as opportunities for preservation. Many environmentally sensitive areas, in their natural state, also perform functions which are impossible or difficult and costly to replace. All of the wetlands described under the constraints section also represent an opportunity for open space preservation or passive parkland development. Each of these areas could stand-alone, or be linked to a network of City parks, open spaces and recreation areas through paths, trails, or greenway corridors.

Creeks

Salmon Creek and Miller Creek are the two major surface water drainage systems within the City. Miller Creek is the larger of the two, draining a total area of approximately 5,230 acres compared to Salmon Creek's 1,390 acre drainage basin. Both stream systems include numerous small tributaries, such as Walker Creek, with lakes and wetlands found in upland depressions. Drainage is predominantly to the west toward Puget Sound, although both Creeks flow in a generally southwest direction. Salmon Creek and Miller Creek are classified by King County as Class 2, salmonid bearing streams.

The characteristics of the stream channels and stream flows in the Miller Creek and Salmon Creek systems are typical of urbanized streams. Both streams have been extensively modified by channelization, culverting, fill and other man-made changes. Miller Creek experiences a moderate level of pollution as a result of urbanization.

Miller Creek flows through three jurisdictions -- the cities of Burien, SeaTac and Normandy Park. In the northern part of Burien, the stream corridor runs through single family neighborhoods. Moving eastward, the stream corridor runs through relatively low density single family development, and in some areas is well-vegetated. The creek's future in SeaTac is currently unknown. Construction of the third runway at SeaTac Airport may cause the stream channel to be relocated. In addition, the City is currently considering different land use alternatives for that area, and may change the future land uses from low density single family development to higher intensity uses such as business parks and multifamily residences, both of which would have an impact on stream conditions and habitat. The City of Normandy Park's comprehensive plan calls for preserving the Miller Creek corridor and creating a network of trails along the stream and connected to the Walker Preserve.

Opportunities exist to preserve the existing vegetated stream corridor by creating a linear trail along the Miller Creek corridor through easements, development standards, or purchase of adjacent vacant land. This corridor could also link any open space, park, historic area or recreation area in close proximity. Opportunities for connecting to corridor trails in Normandy Park, and potentially SeaTac, could also be explored.

As it enters the City from the north, Salmon Creek runs continues through a short stretch of residential areas, soon entering a series of ravines, open spaces and Seahurst Park before joining Puget Sound. A similar strategy of corridor preservation could be implemented along Salmon Creek. Such a strategy would actually enhance the habitat qualities of both of the stream corridors while still offering opportunities for passive enjoyment of the creeks.

Lake Burien

Lake Burien is a 42 acre lake which served as a focal point for activities in the early history of Burien. Currently, the lake is surrounded primarily by single family homes, although the City owns some right-of-way adjacent to the lake on the southeast corner which could be used to allow public access to the lake. However, the site is too small to allow for parking or other facilities. Consequently, the site could be developed as a pedestrian accessible "pocket park" to provide a public viewing spot of Lake Burien.

Historic Places

A survey of potentially valuable historic places was prepared for the City and surrounding communities. These places include but are not limited to the Dodd Homestead (1888) and the Southgate Masonic Temple (1920). The City could consider these structures during the development of the alternatives for the comprehensive plan,

ensure their preservation and enhancement, and strengthen their links to the surrounding community. Another significant historical landmark are the memorial trees along Des Moines Way (although technically in the City of SeaTac).

5.2.7 Downtown

Within the downtown core there are many older commercial and retail structures, as well as large expanses of parking lots surrounding shopping establishments. The City could choose to adopt policies encouraging the redevelopment of these areas based upon a recommended land use strategy for the downtown. This strategy could also include policies for infill development downtown -- developments which “fill in” vacant or underutilized lands. Each alternative could recommend a different scale of development for infill and redevelopment. The strategy could approach redevelopment and infill on an incremental basis or as a complete redevelopment of the downtown core.

Some other opportunities to consider while considering alternatives for downtown include:

- Constructing “gateways” or signs marking the entrance into the City;
- The juxtaposition of different types of uses, and creating a land use pattern which is “intuitive” for visitors;
- Creating a downtown “identity”;
- Adopting a design “theme”; and
- Improving the flow of auto and pedestrian traffic.

Main Street

SW 152nd Street was once the City’s “main street” for shopping and other activities. The main street character could be reinforced in the future land use alternatives. With some land use and development guidelines (including landscaping, design, and parking guidelines), as well as with transportation improvements, a pedestrian-oriented shopping area could occur along SW 152nd Street and in the Old Town Burien area and between Ambaum and 1st Avenue South. Pedestrian linkages could also be created between the library, the transit center, City Hall, and SW 152nd Street. Parts of the *Burien Downtown Urban Design Plan* could be implemented.

Historic Burien

SW 152nd Street between the Masonic Temple (around 10th Ave SW) and Ambaum Boulevard is known as “Old Burien.” Similar to the Main Street concept, with some land use, development and design guidelines, the historic character of this area could be preserved and enhanced. This area could serve as the western edge of the pedestrian core along Main Street.

Plaza/Focal point

Burien does not have a defined center or focal point for the community's downtown. Such a place could help shape the downtown's identity, providing it with a "sense of place." This central place could take the form of a square or plaza, with some design features that make it an attractive place to gather or sit or hold activities. Surrounding the plaza could be shops and restaurants. The plaza should be within walking distance of other major activity centers, such as the transit center.

Gateways

Burien is situated at one of the significant new crossroads in the south King County area – SR 509 and SR 518. This, combined with the 1st Avenue bridge improvements and the proposed SR 509 extension to I-5, increase the potential for new commercial, retail and office development in Burien. As a response, Burien could choose to plan for high density and intensity "gateway" developments composed of office, retail, and commercial development, as well as hotel and convention center type establishments. These gateways should be located near the major access/exit points to the SR 509/518 intersections.

Other

Past development has created large parking areas in many of the commercial areas of the city. These parking areas offer potential for more effective use and their redevelopment could improve the visual character of these areas. In some commercial and multiple family residential areas poor building maintenance have created potential blighted conditions. While these conditions create low property values and other adverse conditions they also offer opportunities for redevelopment.

5.2.8 Summary of the Alternatives

General Comments on All the Alternatives

The planning process identified three planning alternatives to respond to these constraints in the process of achieving the city's vision. A fourth alternative was developed through a process of public review and study of these alternatives.

Some general comments can be made about all of the alternatives. First, as seen in Table 5.2-1, Residential Housing Units, all three alternatives envision varying amounts of growth in the number of households in Burien over the next 25 years, with a continuation of single family homes as the predominant type of residence.⁴ Consequently, all of the alternatives protect the character and integrity of the well established neighborhoods as the City grows. In addition, improving and enhancing the visual quality and character of multifamily areas is an important part of all of the alternatives.

⁴ A more detailed comparison of the alternatives' impacts on housing in Burien is provided under the impacts described in the "Built Environment" section.

Table 5.2-1. Residential Housing Units

Residential (Number of Dwelling Units)	1995 Existing Land Use	2020 Well Established Community	2020 Distinctive Community	2020 Thriving Community	2020 Existing Zoning	2020 Preferred Community
Single Family	7,450	9,822	9,174	11,227	11,227	9,348
<i>Increase from 1995</i>		2,372	1,724	3,777	3,777	1,898
Multiple Family	4,931	5,800	6,548	6,660	6,854	5,914
<i>Increase from 1995</i>		869	1,617	1,729	1,923	983
Downtown 'Mixed Use'	106	106	409	106	206	409
<i>Increase from 1995</i>		-	303		100	303
Other	240	240	240	240	240	240
TOTAL	12,727	15,968	16,371	18,233	18,527	15,911
<i>Increase from 1995</i>		3,241	3,644	5,506	5,800	3,184

The alternatives also focus on creating an enhanced downtown that supports the Burien Vision, makes downtown more visually attractive, and accommodates travel by foot, bicycle, and transit, as well as by automobile. However, each alternative varies in the extent of these improvements. All of the alternatives recommend using design standards and guidelines to create an environment that encourages pedestrian activity, especially along SW 152nd and 153rd Streets, and in Old Burien.

As seen in Table 5.2-2, each alternative differs in the types and levels of growth in businesses and jobs envisioned over the next 20 years for the City.⁵ Over the past 20 years, Burien has experienced a rate of employment growth similar to that of other suburban cities in King County. The rate of employment growth estimated for the “Thriving Community” alternative most closely continues this trend, whereas the rate of growth in the two other alternatives is somewhat less. All of these rates of growth assume an active and effective economic development program by the City.

Table 5.2-2. Projected Increase in Employment

Employment	1995 Existing Land Use	2020 Well-Established Community	2020 Distinctive Community	2020 Thriving Community	2020 Preferred Plan
Retail	3,690	5,295	5,589	6,283	5,726
<i>(Increase from 1995)</i>		+1,605	+1,899	+2,593	+2,036
Service	7,221	8,683	12,032	14,885	10,272
<i>(Increase from 1995)</i>		+1,462	+4,811	+7,664	+3,051
Other	1,876	2,333	3,829	3,187	4,271
<i>(Increase from 1995)</i>		+457	+1,953	+1,311	+2,395
TOTAL	12,787	16,311	21,450	24,355	20,211
<i>(Increase from 1995)</i>		+3,524	+8,663	+11,568	+7,424

Finally, the rate and amount of growth anticipated for the City directly affects the amount of revenue available for municipal services and facilities to support that growth, such as transportation facilities or police and fire services. The rate and amount of growth also

⁵ A more detailed comparison of the alternatives' impacts on employment in Burien is provided under the impacts described in the “Built Environment” section.

affects the City's ability to finance the purchase and development of amenities that increase our quality of life, such as street lighting, sidewalks, and parks, recreation and open spaces. Consequently, each alternative establishes different levels of these services, facilities and amenities based on the type and amount of growth anticipated over the next 20 years.

The Alternatives

No Action – Existing Plans and Regulations

SEPA requires this alternative as the “baseline” for comparing other alternatives. The No Action Alternative maintains existing zoning and other regulations, including allowing the 48 units per acre in the existing R-48 zone. This alternative also assumes no active economic development program leading to continued low employment growth. The No Action Alternative also assumes that there will be no adoption and implementation of the surface water management element, which is included in the other alternatives.

Alternative #1 – The Well-Established Community

The “**Well-established Community**” achieves the Burien Vision by reinforcing the character of existing single family neighborhoods, limiting new multifamily development and improving the quality of existing multifamily areas, and enhancing existing development in the downtown area. Compared with the other alternatives, this alternative establishes a pattern of development most similar to existing patterns in the community.

As seen in Table 5.2-1, this alternative allows for the least amount of total residential growth of all the alternatives, with single family homes comprising a significant portion of the new growth. Policies associated with this alternative reduce the potential for new residential growth from current zoning, by matching future zoning to the current density of development in single family neighborhoods, and by allowing only limited development in areas with constraints on development. Consequently, what change occurs comes as people make improvements to existing homes, and through limited subdivision or short platting of large or vacant lots. Policies for this alternative discourage the current practice of allowing the development of townhouses and duplexes in higher density single family areas.

This alternative is the most restrictive of all the alternatives in allowing new multifamily development. Policies establish lower maximum densities for multifamily development than currently allowed. This alternative also responds to community concerns by requiring improved management of multifamily areas, such as improving their visual quality and character, blending these uses with adjacent single family neighborhoods, and improving pedestrian linkages between multifamily developments and community activity centers. Design guidelines and standards for parking, landscaping, and open space are also be applied to new multifamily developments.

Changes taking place downtown in this alternative reinforce and enhance the City's small town character and friendly atmosphere, and encourage pedestrian activity. This alternative does not encourage significant new growth or economic development.

Consequently, this alternative anticipates the least amount of growth in employment of all of the alternatives (see Table 5.2-2). The changes that occur in the downtown core take place through a gradual process of infill and redevelopment of lots, buildings and vacant areas. Policies will also encourage other types of downtown enhancements, such as design themes to visually “tie” new and existing businesses together and produce a cohesive character.

The goals and policies for this alternative attempt to create a downtown known for its smaller specialty shops rather than large scale chain stores or malls. A town square will enhance the downtown’s identity and serve as a focal point for the community. Design standards and guidelines create a streetscape that encourages pedestrian activity, especially along Main Street (SW 152nd Street) and Burien’s “Historic District.” Existing offices, businesses and retail activities serving the regional demand for services, goods and autos are still found along the major arterials near downtown. The City will continue relying on existing sources of revenue, including sales tax from car dealerships. However, commercial and industrial areas are not expanded under this alternative.

While the slower rate of growth anticipated under this alternative preserves community values, it also has its consequences. While the need for significant capital improvements to support new growth is less than in other alternatives, so is the anticipated tax base. Consequently, when compared to the other alternatives, there are less funds to pay for necessary services and facilities, and less opportunity to acquire other amenities, such as additions to the network of parks, recreation and open space facilities. Under this alternative, the only anticipated acquisition of additional parks, recreation or open space are the Highline School District’s proposed surplus school sites. In addition, this alternative also envisions a limited network of the community paths that connect neighborhoods with other activity areas, such as schools, shopping, and the existing park system.

In summary, the major characteristics of this alternative include:

- Some reduction in residential growth potential: downzone existing single & multi family areas to match existing densities (number of houses per acre);
- A land use pattern most similar to existing land use patterns;
- Slower growth ⇒ less tax base ⇒ less need for capital improvements, and less opportunity for adding amenities;
- Limited acquisition of parks/recreation/open space.
- Existing downtown commercial & retail uses are enhanced through design “themes”;
- A town plaza or square as downtown’s focal point; and
- Increased downtown’s pedestrian orientation.

Alternative #2 -- The Distinctive Community

The “**Distinctive Community**” achieves the Burien Vision by emphasizing the distinctive qualities of our City, especially in the downtown, while at the same time focusing on protecting neighborhood integrity and the environmentally sensitive lands.

Overall, this alternative is similar to Alternative 1 in the total number of new residences anticipated by the year 2020 (see Table 5.2-1). However, this alternative calls for the least amount of growth in the single family neighborhoods. To reinforce the neighborhoods' existing character, as well as protect environmentally sensitive areas, policies reduce some of the potential for new residential growth by matching zoning to the current density of development. This alternative also achieves greater reductions in development potential than Alternative 1 by restricting development in areas with wetlands, storm water drainage problems, or steep slopes prone to landslides. Consequently, there will be minimal changes in single family neighborhoods, except from enhancements or improvements to existing residences.

To balance the restrictions on new development in single family neighborhoods, this alternative allows new well-designed, moderate density apartments, townhouses or condominiums in areas currently designated for multifamily development and located near services, transit facilities and downtown. Similar to all of the alternatives, this alternative emphasizes improving the management and the visual character of multifamily development.

This alternative also focuses on creating a downtown environment where people live, work and play. Key policies to accomplish this allow a mix of uses in the downtown core where a significant portion of new multifamily dwellers would locate. Nicely designed condominiums or apartments located above stores and shops offer an alternative to those wanting to live within walking distance of shopping, work and transit. In addition, policies attempt to create the type of atmosphere that encourages a moderate amount of new jobs and attracts shoppers (see Table 5.2-2). Moving from the edge of downtown towards the center, the scale of development and the types of uses change from larger buildings occupied by more intensive commercial uses, to smaller-scaled buildings containing a mix of uses. Policies call for a square or plaza at the center of downtown that serve as a focal point for the community.

One of the hallmarks of this alternative are policies creating a distinctive, quality downtown that promotes pedestrian activity and a variety of uses. Policies create, support and define the downtown's border by encouraging specific types of development to locate strategically around the edge of downtown. For example, this alternative envisions locating a well-designed, small-scale hotel at the entrance to downtown in the vicinity of SW 148th Ave. and 1st Ave. Policies addressing design guidelines and standards foster a pedestrian environment oriented on Main Street and in the Historic District. Policies also call for the infill and redevelopment of large parking lots and existing structures. In addition, design guidelines are used to create a more attractive streetscape and enhance pedestrian orientation using a unifying theme and landscaping.

This alternative also provides new areas for economic development. In the northeastern part of the City, policies encourage development of a business park containing airport-oriented industrial and warehouse uses. Elsewhere, this alternative calls for office

buildings clustered along 1st Avenue South and an expansion of medical-related offices north of the hospital.

Protecting natural features and environmental quality is a prominent feature of this alternative. By encouraging infill and redevelopment in portions of the City that can support it, the City can use the funds that would have been spent on infrastructure costs to instead promote a system of parks, recreation and open space, linked by a network of community paths. Important areas to protect and incorporate into this system are wetlands, steep slopes, the Miller Creek Corridor, and additions to Salmon Creek Ravine and Seahurst Park.

In summary, the major characteristics of this alternative include:

- Lowest growth potential in single family areas: involving downzones to match existing densities and reducing new housing in areas prone to landslides;
- Some new housing accommodated in existing moderate density multifamily areas near downtown;
- Focuses economic development in downtown;
- “Distinctive” commercial & retail developments marking downtown “edge”;
- A town plaza or square as the downtown focal point;
- Mixed uses downtown;
- Increase downtown’s pedestrian orientation; and
- Enhanced environmental protective measures.

Alternative #3 – The Thriving Community

The “**Thriving Community**” achieves the Vision by providing the greatest potential for economic growth in the downtown core, while ensuring that the character and integrity of the neighborhoods remain intact. One of the main objectives of this alternative is to capitalize upon Burien’s position at the crossroads of two major highways (SR 509 & 518) leading to SeaTac Airport, downtown Seattle, and points south. Under this alternative, the City attracts more jobs and growth than in the other alternatives, and just as importantly, directs the location and appearance of that growth so that the community’s Vision is still supported. The quality of life is also reinforced by using an increased tax base to meet the needs for municipal facilities and services, and to expand the City’s amenities, such as sidewalks, lighting, and parks, recreation, and open space areas.

As seen in Table 5.2-1, this alternative allows for the greatest increase in housing of all the alternatives. However, this alternative allows for a significantly greater amount of new single family development than in the other alternatives because it retains the current zoning. Consequently, neighborhood changes occur as the areas densify through short platting, with some development of vacant lots and redevelopment of smaller, older homes. However, policies and design guidelines address how these changes could take place and still protect the integrity of existing neighborhood character. Where appropriate, well-designed accessory apartments and townhouses that “blend in” with

neighborhood character are also allowed in areas zoned for higher single family densities near downtown.

The remaining demand for new housing is accommodated by well-designed, moderate to high density multifamily housing located near downtown, as well as in mixed use developments in the downtown core. Policies focus on establishing design guidelines for multifamily development to ensure that they blend in with adjacent single family neighborhoods, and that amenities such as parks and open space are provided.

Downtown undergoes significant change in the pattern and scale of development to become a focal point for economic development within the community. This alternative envisions a compact downtown where pedestrian activity is encouraged and reliance on the automobile is reduced. To accomplish this, the size, scale and density of buildings increases moving from the edge of downtown towards its center. Less intensive commercial activities border downtown along Ambaum Blvd. SW and 1st Avenue South. A mix of uses are allowed in low rise, mix use developments in the center of downtown - commercial, retail and office activities on the first floor, with apartments or condominiums located on the upper floors. A higher density core of office, retail and commercial buildings is located in the center of downtown near the transit center.

While there is an increase in development anticipated in the downtown core, policies ensure that a pedestrian oriented environment remains a priority. Consequently, policies call for enhancing the Historic District and the pedestrian-oriented Main Street is expanded to include parts of SW 153rd St. Under this alternative, city government buildings and the town square are relocated to the edge of downtown to take advantage of lower property values.

In this alternative, the majority of the new jobs and commercial, retail and office uses are focused in one or two moderately sized, attractive developments at intersections along SR 509. Easily accessible from the highway, these centers contain a large hotel with conference facilities and related retail and office uses. The hospital area is another center for growth, expanding to provide more medical-related offices and services not currently found in the City.

More economic development in this alternative means a greater need for capital improvements to support the increase in growth. However, it also implies that the tax base will expand, allowing the City to finance the needed improvements and municipal services and facilities, such as purchasing additional fire and police services; developing an excellent system of parks, trails, open space and recreation facilities; preserving historic sites; or improving our transportation network with lighting, sidewalks, and design enhancements.

In summary, the major characteristics of this alternative include:

- Existing single family zoning remains the same ;
- Accessory apartments & townhouses allowed in single family areas;

- Moderate to high density multifamily homes allowed only in existing multifamily areas & near downtown;
- Greatest potential for economic development \Rightarrow highest tax base \Rightarrow more capital improvements, needs & opportunities;
- Economic development focused in downtown core & near major highway intersections;
- Mixed uses downtown;
- Increase downtown's pedestrian orientation;
- Increase acquisition of parks/recreation/open space.

Alternative #4 - The Burien Plan (The Preferred Alternative)

The “**Preferred Alternative**” was developed on the basis of the other alternatives. To a large degree, its policies and measures were selected on the basis of an analysis of the impacts of each alternative. Consequently, the Preferred Alternative's provisions constitute mitigating measures for the impacts associated with each of the other alternatives.

Similarly to the Distinctive Community alternative, the Preferred Alternative achieves the Burien Vision by emphasizing the distinctive qualities of our City, especially in the downtown, while at the same time focusing on protecting neighborhood character and the environmentally sensitive lands by encouraging new multifamily housing and residential mixed use developments in the downtown area.

As seen in Table 5.2-1, this alternative allows for slightly more growth in the total number of new single-family residences anticipated by the year 2020 than the Distinctive Community. However, this alternative calls for a lower amount of growth in the single family neighborhoods than Alternatives 1 and 3, in order to reinforce the single family neighborhoods' existing character and protect environmentally sensitive areas. Policies call for reducing some of the potential for new residential growth by matching zoning to the current density of development. This alternative also achieves greater reductions in development potential similar in areas with wetlands, storm water drainage problems, or steep slopes prone to landslides. Consequently, there will be minimal changes in single family neighborhoods, except from enhancements or improvements to existing residences.

To balance the limitations on new development in single family neighborhoods, the Preferred Alternative allows for slightly more growth in multiple family residences than the other alternatives. Key policies to accomplish this allow a mix of uses in and around the downtown core where a significant portion of new multifamily dwellers would locate. Nicely designed condominiums or apartments located above stores and shops offer an alternative to those wanting to live within walking distance of shopping, work and transit. Similar to all of the alternatives, this alternative strongly emphasizes improving the management and the visual character of multifamily development throughout the City through the use of design guidelines.

Similar to Alternative 2, this alternative ensures that the types of uses and activities, as well as the scale and design of buildings, enhances the distinctiveness and vitality of downtown while preserving its small town character and accommodating the needs of Burien residents. Compared to Alternatives 2 and 3, the land use pattern established for this alternative promotes a smaller amount of growth in new jobs, but more than under Alternative 1 (see Table 5.2-2).

Buildings in the downtown area will be low scale, probably 5 to 6 stories in height. In designated “Special Enhancement Areas”, unique developments defining the entrances into Burien, as well as into downtown, are encouraged using a mix of incentives and requirements. For example, a well-designed, small-scale hotel with conference center is encouraged to locate in the vicinity of SW 148th Ave. and 1st Ave S. While downtown needs to be accessible by the automobile, there are specific areas where pedestrian and transit activities are supported and emphasized such as along SW 152 and 153 Streets, in Old Burien, and where residential areas are mixed in with other uses. Policies also call for the infill and redevelopment of large parking lots and existing structures, where appropriate.

Design guidelines are used to ensure that the type and location of development established by this alternative still supports the Burien Vision. Design guidelines ensure a unifying quality visual environment for old and new development in both the community’s residential neighborhoods and downtown. The guidelines will promote the use of landscaping, provide visual interest for the pedestrian on the downtown sidewalks, and ensure the compatibility of multifamily buildings with surrounding single family neighborhoods. The character of the City’s neighborhoods is also influenced by the type of infrastructure that supports development. Consequently, recommended standards for street and stormwater facility design and construction vary by area, based on whether the neighborhood is more urban or suburban in nature.

This alternative also considers new areas for economic development, including office buildings clustered along 1st Avenue South and an expansion of medical-related offices north of the hospital. In the northeastern part of the City, this alternative establishes a “Special Planning Area” where, subject to a feasibility study, a business park containing airport-oriented industrial and warehouse uses could be developed.

Protecting natural features and environmental quality is a prominent feature of this alternative. While this alternative recognizes the importance of “green areas” within our neighborhoods and community, it also recognizes the limited funding available for new parks, recreation and open space. Therefore, policies recommend using the City’s existing facilities to the maximum extent possible before exploring opportunities for the acquisition or development of new resources. This strategy calls for emphasizing the maintenance, enhancement and multiple use of existing parks, recreation facilities and open spaces, including schools and stormwater drainage facilities. These resources could be further expanded by connecting them with neighborhoods and downtown via a coordinated network of community paths and neighborhood trails. Important areas to protect and incorporate into this system are wetlands, steep slopes, the Miller Creek

Corridor, and additions to Salmon Creek Ravine and Seahurst Park. Balancing the downtown built environment with open spaces and small “pocket parks” is also important, and a town square or plaza at the center of downtown serves as a focal point for the community.

In summary, the major characteristics of this alternative include:

- The second highest growth potential in the total number of new housing over the next 25 years;
- The second lowest growth potential in single family areas of all the alternatives: involving downzones to match existing densities and reducing new housing in areas prone to landslides;
- The majority of new housing accommodated in low and moderate density multifamily areas and in mixed use developments in the downtown core; some higher density housing near downtown, provided design requirements are met;
- The use of design guidelines to unify downtown development, promote pedestrian activities, and ensure compatibility of adjacent development;
- The second lowest growth potential in employment of all the alternatives, although highest potential increase in OTHER category of jobs;
- Focuses economic development in downtown and along the principal arterials;
- Encourages “distinctive” commercial & retail developments marking downtown “edge”;
- Mixed uses downtown;
- Increases downtown’s pedestrian orientation;
- Enhanced environmental protective measures; and
- Maximizes the use of existing park, recreation and open space uses and links these resources with community paths and neighborhood trails.

5.2.9 Environmental Analysis of the Alternatives

Introduction

Each Alternative presents different impacts on the natural environment which includes earth, water resources, floodplains, shorelines, plants and animals, air quality, scenic resources and energy.

Earth

Impacts

The Thriving Alternative and No Action Alternatives impose the most impacts on the earth related resources of the City. Each would allow continued development of steep slopes, environmentally sensitive and landslide hazard areas at near urban densities of 4 units per acre. This level of development in these areas would require extensive engineering in order to stabilize the slopes. In addition to the impacts of the high development intensity, these two alternatives would also require extensive improvement of public facilities to support this level of development. Most importantly, the major

streets would require reconstruction to safely support additional traffic. Currently, appropriate sight clearance requirements cannot be met on many of the roads serving this area, and reconstruction would involve both arterials and local streets. In some cases, such as along 172nd Street, the reconstruction may adversely affect adjacent residences and lead to wetland fills. Extensive development of surface water management systems would also be required to avoid destabilizing the soils with runoff seepage. In addition, the No Action Alternative would continue to exempt single family dwellings from specific regulations in steep slope sensitive areas.

The Well Established Alternative reduces the impacts described above by lowering allowable densities to three units per acre in these sensitive areas. The Distinctive Alternative also further reduces densities in these areas to two units per acre, on the basis of environmental limitations associated with earth resources.

The Thriving Alternative allows urban level densities (generally at six units per acre) in the areas not served by sewers. Such intensity of development will require installation of sewer systems. While this will mitigate some potential impacts, it may also impose financial hardships on households with lower incomes in these areas. The other alternatives reduces the potential for development and consequently, the need for sewers in these areas.

All of the alternatives allow only low rise development in the seismic hazard areas, subject to new building codes.

Mitigating Measures

The Preferred Alternative incorporates the provisions of the Distinctive Alternative that focus new development into the city center and reduces the allowable densities to two units per acre in the most environmentally sensitive areas along the Puget Sound coastline. While significant development could still occur at these densities, the Preferred Alternative substantially reduces potential impacts on the earth.

The Preferred Alternative mitigates potential impacts by reducing the allowable densities in most of the single family neighborhoods. This measure is particularly important in reducing the potential impacts associated with street reconstruction to support new growth.

In order to mitigate the potential impacts of the lower density developments still allowed under the plan, policies will require applying special precautions, development standards, and best management practices before development occurs in erosion and landslide hazard areas. Adoption of the policies and measures incorporated into the Surface Water Management Element will be particularly important in mitigating the impacts of new development. The Preferred Alternative requires special review of development projects on steep slopes to avoid uncontrolled storm water runoff and seepage from springs that could disturb soils, contribute to erosion, and aggravate landslide problems.

The Preferred Alternative will also reduce allowable densities in the sensitive tributary areas of Miller Creek and will preserve the Salmon Creek Ravine in open space.

The plan also reduces development potential in areas not served by sewer systems, thereby avoiding potential impacts associated with septic tanks in such areas.

The Preferred Alternative eliminates some high density zoning in areas in the drainage basins and streams along the coastline that could lead to significant adverse impacts on earth resources.

While the plan does allow development in the designated seismic hazard areas, new construction in these areas will be governed by the more rigorous building codes that have been established in recent years.

Water Resources

Water resources include ground water and aquifer recharge areas, surface water resources and wetlands.

Ground Water and Aquifer Recharge Areas

Impacts of the Alternatives

The No Action Alternative will continue the current regulatory system that lacks coordination with land use controls. These deficiencies could lead to development projects that result in adverse impacts on these resources.

Since the No Action Alternative would not include the development of a surface water management plan, there would continue to be the lack of an overall strategy to adequately manage and protect these surface waters in the city. This could result in adverse impacts on these resources.

All of the other alternatives envision a storm water management system that improves the management of storm water and potential contamination of ground water. However, the alternatives manage growth very differently to protect the area's aquifer resources. The Distinctive Alternative seeks to limit potential threats to aquifer resources by limiting development in significant aquifer recharge areas. These areas are primarily the unsewered areas in the northeast. The Thriving Alternative envisions higher densities to encourage the development of sanitary sewer systems, thereby removing the potential threat from existing septic tanks on these resources.

Mitigating Measures

The Preferred Alternative would reduce potential densities in the recharge areas where unmanaged development could pose a threat to the aquifer. Where development is allowed, it could only occur after providing adequate storm water and sanitary sewer collection facilities.

Surface Water Resources

Impacts of the Alternatives

Currently the management of surface water is accomplished on a case by case approach that evaluates the impacts of individual developments. While this evaluation is based on the King County Surface Water Management Manual, it is not guided by an overall management plan that coordinates individual actions with a consistent storm water management system. Also, there is no overall plan for installing needed public drainage facilities. Currently, the public facility program responds to the most recent severe problem requiring attention. This approach has not adequately addressed flooding problems, nor does it adequately control urban runoff into the City's surface water resources. Thus, the quality of those resources is degrading. In appropriate control of runoff on steep slopes can and may have already increased the instability of some these areas, contributing to slide hazards. The draft storm water master plan documents these problems.

The No Action Alternative would continue the fragmented management of surface water by not instituting the Storm Water Master Plan Element.

All of the other alternatives envision a storm water management system that improves the management of storm water and controls the potential contamination of surface waters. However, in managing growth, the alternatives take very different approaches.

The Distinctive Alternative limits the development potential in single family neighborhoods. Instead, the alternative provides economies of scale by focusing new growth into the center where significant surface water management improvements are needed to remove existing potential limits on growth. Consequently, this strategy supports more development with the same amount of investment. By limiting growth in the neighborhoods, the amount of storm water improvements needed there is reduced.

The Thriving Alternative envisions higher densities and intensities of development throughout the City than the other alternatives. This land use pattern will require significantly more improvements to support development. Since the Thriving Alternative also has no phasing mechanism that would allow scheduling of these improvements,⁶ this alternative would require more improvements serving more areas at once. This lack of phasing could also divert available financial resources from the city center, potentially constraining downtown revitalization due to storm water management constraints.

Since the draft storm water master plan considers a range of alternative management actions for each of the basins, that comparison of alternatives will not be repeated here.

⁶ While phasing policies could be added, these policies would tend to be inconsistent with the Alternative's objectives.

Mitigating Measures

The Preferred Alternative includes the land use strategy of the Distinctive Alternative (as described above) and the adoption of a storm water master plan. In so doing, the Plan also supports a land use pattern that can be more effectively supported by needed storm water facilities.

The Preferred Alternative eliminates some high density zoning in areas in the drainage basins and streams along the coastline that could lead to significant adverse impacts on the management of storm water impacts within this basin.

Streams and Lakes

Impacts of the Alternatives

The Storm Water Master Plan describes problems associated with urban runoff in each of the City's drainage basins and their receiving surface waters. Under the No Action Alternative, most of these problems would continue. In addition, the land use pattern associated with the No Action and Thriving Alternatives would lead to more intensive urbanization, with potentially less control of storm water over larger areas, contributing to more non-point urban run off. This could be a particularly important consideration in the more sensitive water bodies such as Miller Creek and Lake Burien. For example, these two alternatives would allow significantly more growth in the basin that drains directly into Lake Burien.

While the other alternatives would also contribute additional urban development, adding to potential water quality consideration, each promotes a land use pattern that imposes less of a potential threat. In addition, the focused development policies of the Distinctive Alternative offer more potential revenue through additional growth to finance needed management systems in a cost effective manner.

Mitigating Measures

The Preferred Alternative incorporates the focused land use development policies of the Distinctive Alternative as it relates to impacts in streams and lakes.

The Preferred Alternative incorporates implementation of the Storm Water Management Plan. The Plan also reduces densities in important basins. Most notably, the areas immediately abutting Lake Burien are reduced from 6 units to 3 units per acre. The Plan makes similar reductions in allowable densities along the sensitive Miller Creek as it flows through the northeastern portion of the City.

The Storm Water Management Plan also incorporates two major improvements designed to improve water quality in Miller Creek and Salmon Creek. For each basin, the Plan envisions construction of a pipeline to divert peak storm water flows from the sensitive

creek beds. This diversion will remove the adverse environmental impacts that peak flow imposes on the creek bed, allowing the creeks to be restored to more natural conditions.⁷

Wetlands

Impacts of the Alternatives

While there are significant major wetland areas in the City, none of the basic policy approaches embodied in the alternatives directly affect their management. All (including No Action) would incorporate the appropriate environmental sensitive areas management policies to protect their integrity. In addition, the Thriving Alternative envisions purchasing and protecting some of the more significant of these areas.

However, each alternative does potentially affect potential wetland resources. The lower densities envisioned in the Distinctive Alternative (and to a lesser extent the Well Established Alternative) will reduce the potential encroachment into these resources and the amount of urban runoff that could threaten their quality. This will be especially important for smaller, more isolated wetland areas. The higher density residential development envisioned in the No Action and Thriving Alternatives allows relatively small lot sizes to be approved on a piecemeal basis through a series of short plats. The short platting process makes it difficult to adequately assess and manage indirect impacts on wetlands, such as increased urban run-off, and potential encroachment onto smaller wetlands. Consequently, these alternatives could lead to increased degradation of these resources.

Mitigating Measures

All of the Alternatives, including No Action, will maintain the current environmental sensitive area ordinances that provide significant protection of these resources. The Preferred Alternative adopts the general land use strategy of the Distinctive Alternative as it relates to these impacts on wetlands. In addition, the Preferred Alternative bolsters these measures with additional wetland protection policies that will be used in the review of development proposals.

Floodplains

Impacts of the Alternatives

Since the City has a small amount of flood plains of limited extent, all of the proposed alternatives to No Action generally do not change the management of these areas. Each would include policies to prevent the inappropriate development of these areas.

⁷ Potential construction impacts of these facilities will be addressed in appropriate project level analysis under the State Environmental Policy Act (SEPA).

Mitigating Measures

The Preferred Alternative will include and enhance the current regulations and policies managing the City's flood plains.

Shorelines

Impacts of the Alternatives

Local ordinance, adopted by King County under the State Shoreline Management Act, manages the Shorelines of the city. While none of the alternatives would change directly this program, it is envisioned that the program will be updated some time in the future.

Since most of the privately owned shoreline is already developed, the planning alternatives will not substantially alter current shoreline use patterns. In the few remaining vacant areas, the Distinctive Alternative would substantially reduce the amount of development that may occur along the shoreline. All of the alternatives (probably including the No Action alternative) would continue to retain any existing open space areas in public ownership.

The Distinctive Alternative would reduce development pressure near the shoreline areas by reducing the amount of single family dwellings allowed in adjacent steep-sloped areas (from the current four units per acre to two units). The Thriving and No Action Alternatives would continue to allow development at the current zoning pattern of four units per acre. This difference would also result in less adverse impacts on environmentally sensitive areas and water quality.

If the Ruth Dykman Center ever discontinued its use of its site, the Distinctive Alternative encourages the development of a water related commercial use with controlled public access to Lake Burien. Such access would be limited primarily to views and passive recreation, since active recreation could adversely affect water quality. Since the No Action Alternative (and potentially the Thriving Alternative) could allow up to 170 units of multifamily development on the site, significant adverse impacts on both the water quality and the adjacent shoreline could result, and visual amenities currently associated with the Lake reduced.

Mitigating Measures

The Preferred Alternative would continue to reserve important shoreline areas in public ownership. It also continues to support and, to the extent appropriate, enhance public access. The plan will also include appropriate policies to consider views and other shoreline environmental assets in reviewing new development proposals.

In regards to Lake Burien, the Preferred Alternative is similar to the Distinctive Alternative, but more oriented to reviewing potential reuse of this area to fit into and enhance the site's location on the Lake and its close proximity to Old Burien.

Plants and Animals

Plant Communities

Impacts of the Alternatives

Each of the alternatives would have similar impacts on the flora of the community. All will generally preserve existing publicly owned natural areas and allow some development of the scattered vacant land. The difference between the alternatives is primarily of a limited degree, with the Distinctive and Preferred Alternatives involving fewer housing units, and the No Action and Thriving Alternatives allowing more (Well Established lying in between). However any development of vacant land would alter the flora of the lot, irrespective of the density. The most significant aspect of the potential impacts of future development under any alternative is the removal of trees and the extent to which the Plan would require or encourage appropriate landscaping. The No Action Alternative has minimal restrictions on tree removal and minimal standards on landscaping. Each planning alternative could add appropriate policies.

Mitigating Measures

The Preferred Alternative establishes SEPA policies requiring the review of significant projects on the flora resources of the City.

The policies of the Preferred Alternative promote the retention of significant trees and require additional landscaping for both residential and commercial uses.

Wildlife and Habitat

All three alternatives include the most significant contribution that the Plan can make to the protection of wildlife habitat -- the continued preservation of the large, relatively natural areas of Seahurst Park and Salmon Creek Ravine as open space. The Preferred Alternative not only supports this, it reduces the potential encroachments into these areas by larger multiple family housing developments.

Timber and Agricultural Lands

The Washington State Growth Management Act of 1990 requires cities to inventory, designate and regulate development on natural resource lands, including productive timber and agricultural lands. Burien is developed, and none of these types of land uses currently exist within the City.

Air Quality

Impacts of the Alternatives

Both local and regional growth and development pose potential threats to the city's air quality. While the Thriving Alternative allows for the most local growth (and hence an increase in potential local generation of air pollutants), none of the alternatives materially effects any of the major threats to air quality. Major regional threats include traffic on several state highways and arterials, including state routes 518 and 509 and SeaTac

Airport. At this time there are no known CO “hotspots” associated with either SR 518 or 509 in the proximity of city.

Air quality impacts of emissions associated with SeaTac airport-related motor vehicle traffic, aircraft operations, and ground support activities are unknown. Air quality modeling conducted by the Port of Seattle for the SeaTac Master Plan identified potential CO hotspots east of SeaTac at intersections along International Boulevard; however, subsequent in-field monitoring by Ecology in 1996-97 found CO levels well below the federal standard. The Port also modeled emissions for NOx (just off the north end of the SeaTac runway due east of Burien) and predicted that the EPA standard might be exceeded. At this time there is no field data to verify, refute or otherwise qualify these modeled findings.

Based on anecdotal reports and citizen complaints, PSAPCA is aware of SeaTac community concerns about airport vicinity residue fallout/deposition, jet fuel odors and long-term health risks associated with exposure to toxic pollutants in the ambient air. Ecology is expected to conduct ground-level fallout from aircraft around SeaTac during 1997-98. If construction of new airport facilities occurs as proposed by the Port of Seattle, PSAPCA will have the responsibility of enforcing local fugitive dust regulations associated with construction activities.

According to PSAPCA reliance upon woodstoves and fireplaces as a primary residential heat source is steadily declining throughout the region as the market of natural gas heat grows for both new construction and conversions. Therefore, it is expected that air quality impacts of future development will not be significant for this emission source.

Mitigating Measures

Air quality impacts from regional sources is expected to be similar amongst all the alternatives. At the local level, the Preferred Alternative focuses population and employment growth into the downtown area. Concentration of residential and employment growth into one area will provide an opportunity to reduce reliance upon single occupancy vehicles and an opportunity to increase pedestrian and transit usage. This will be partially achieved through the advent of mixed-use development. Land use compatibility is achieved under the Preferred Alternative by separating (through distinct land use designations) sensitive receptors such as schools and residential areas from air quality impacts. One example is the Special Planning Area located in the northeast part of the city, which is currently affected by noise and jet fuel odors from SeaTac airport. The Preferred Alternative would overtime change this residential area to a commercial or light industrial. This land use change would allow nonresidential uses that are more compatible with the effects of heavy air traffic.

All activity under the Plan would have to be in conformance with those regulations promulgated by the U.S. Environmental Protection Agency (EPA) governing the concentrations of pollutants in the outside air as well as contaminant emissions from air pollution sources. If unregulated, these pollutants could cause adverse human health effects. Air quality standards have been established for total suspended particulate matter

(TSP), inhalable particulate matter (PM₁₀), sulfur dioxide (SO₂), carbon monoxide (CO), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb).

Scenic Resources

Impacts of the Alternatives

The visual amenities and scenic resources of the city will remain predominately same under all of the alternatives. Nonetheless some of the ways that the alternatives permit or encourage new development will produce noticeable, although somewhat subtle changes in the visual character of the city. Under all of the alternatives the scenic views to the east of the city would continue to be dominated by air traffic overflight in to and out of Seatac International Airport.

The Thriving Alternative would create the most difference by supporting the most development. Prominent features of this alternative could be redevelopment of two of the city's freeway interchanges with moderate to high-rise office building. More intensive development in the residential areas could reduce the amount of trees. This would alter the character of some of the views, especially in the coastal area. Successful economic development under this alternative could also reduce blighting influences.

The Well Established Alternative would maintain the current views much as they are today. The low level of potential redevelopment than may occur under this alternative could allow some of the blighted areas to remain and potentially expand.

The Distinctive Alternative seeks to maintain the visual quality of the neighborhood while enhancing the visual quality of the commercial areas.

The No Action Alternative will allow the continued increase in density of residential areas. This could result in the reduction of trees now found in these areas. This alternative would not change the current visual character of downtown and other commercial areas.

Mitigating Measures

Protection of significant scenic views are specifically addressed in the policies of the character element in the Preferred Alternative. Design review policies for the downtown area are intended to enhance its visual quality. The plan will also actively promote the redevelopment of the downtown area. The Preferred Alternative will also require landscaping to be included in all of the major developments that may occur in the city.

Energy

Impacts of the Alternatives

Since none of the alternatives will increase total regional population, their impact will primarily affect the distribution of energy consumption within the region. All of the alternatives can incorporate some of the transportation policies included in the Preferred Alternative that will assist in regional energy conservation. The Distinctive Alternative is particularly strong in promoting a use pattern that can be most efficiently served by

transit, and one that minimizes Single Occupancy Vehicle use since it envisions a substantial amount of mixed uses and multifamily development in close proximity to services, facilities and transit.

While the Thriving Alternative will increase local demand more than the other alternatives, the difference should not have a material impact on the distribution system.

Mitigating Measures

The more compact urban form of the Preferred Alternative, especially in conjunction with the implementation of Growth Management throughout the county would conserve energy resources by reducing miles traveled between work, shopping and residence. Particularly important in this regard is the mixed use and higher density multifamily development that the Preferred Alternative would allow and promote in the city center.

Environmental Health

This section examines factors that affect the environmental health in Burien, including electromagnetic fields and noise.

Electromagnetic Fields (EMF)

Impacts of the Alternatives

None of the alternatives provide significant impacts.

Mitigating Measures

Development review under the plan will consider the potential impacts of new development on increasing exposures to electromagnetic fields.

Noise

Impacts of the Alternatives

Noise is a major planning consideration in this Plan. Noise is examined from the context of how to manage land use around a major noise generator, SeaTac Airport, rather than how to mitigate impacts of new development.

The most noise-impacted area from the airport is in the northeastern part of the City. The Distinctive Alternative's strategy recognizes that airport-related noise will gradually undermine the quality of the affected neighborhood, necessitating a change in the use of this area to a more noise tolerant pattern.

The Well Established Alternative's strategy acknowledges the existing qualities of the affected northeastern area that have withstood the noise impacts to date. Studies suggest that the relative low density of the area provide offsetting amenities that make the area attractive for starter home ownership. Consequently, relatively nice homes can be

purchased as starter homes on a very affordable basis. The low densities minimize the generation of other urban noises, making the airport noise more livable. The northeastern area has an additional advantage of having excellent access to major regional employment centers. The Well Established Alternative seeks to protect these qualities and thereby the ability of this area to survive as a viable, if unique, neighborhood.

The Distinctive Alternative increases noise in the downtown area by promoting revitalization of the downtown core. This alternative would also reduce potential noise generation in single family areas by reducing allowable densities. The Well Established Alternative would produce the least potential noise impacts by allowing the lowest level of residential and commercial growth. The No Action and Thriving Alternatives could produce the most growth and hence the most potential for additional noise generation. However, in all cases the noise potential of each alternative is very insignificant in comparison to the existing and potential noise generation associated with air traffic over the community.

Mitigating Measures

The Preferred Alternative recognizes that the strategy in the Well Established Alternative may be difficult to achieve and maintain. Increasing noise with increasing operations at the airport could alter the balance of noise and amenities, suddenly and rapidly leading to neighborhood degradation and blight.⁸ This will be especially true if the third runway is built. Conversely, noise mitigation measures (especially stage two engines) along with mitigation for the third runway could sustain, or perhaps even improve the livability of this area. The Preferred Alternative's strategy is to keep land use options open, on one hand maintaining the low density character, but anticipating the need for a conversion to more noise-tolerant uses if blighting influences start to overwhelm the area.

In The Preferred Alternative, reduced densities in single family neighborhoods will decrease ambient noise impacts in those areas. Policies incorporated into the Preferred Alternative to requiring additional landscaping and tree retention will buffer noise impacts associated with new development and the airport. The downtown amenities envisioned in the plan will compensate to some degree for the increased levels of urban activity permitted in the plan.

Land Use and Land Use Patterns

Impacts of the Alternatives

The nature of a land use plan is to describe how and where various land uses will be allowed in the City. Even the No Action Alternative will impact existing land use patterns because it continues current regulations and allows additional development. While all of the alternatives would create a pattern of use relatively similar to the existing pattern, each would significantly change the *character* of that use.

⁸ There are already localized areas where this process may be occurring.

The No Action Alternative along with the Thriving Alternative would do the most to change the character of existing land uses. Under these alternatives, single family neighborhoods could be redeveloped into a much denser residential pattern, altering neighborhood character and relationships. The lot design flexibility in No Action could result in many irregular lots with little relationship to existing streetscapes. For example, in many cases such redevelopment could consist of new lots and units in the backyards of existing houses. The Thriving Alternative maintains these neighborhood impacts, as well as allowing high-density office development (exceeding existing height limits) at the major freeway interchanges.

The least change would occur in the Well Established Alternative, which is designed to be the closest match between the Plan and existing land uses and patterns. The Alternative maintains the existing character of downtown, which may be described as struggling to hold on to its viability as a commercial area.

While the Distinctive Alternative conserves the existing character of the single-family neighborhoods, it also envisions substantial change in the commercial area of the City and along Des Moines Memorial Drive. Under this alternative, downtown uses and character would be gradually transformed into a revitalized downtown, more intensive than today but still in keeping with current height limits. It also anticipates the redevelopment of residential areas in the northeast near the flight tracks of the airport into low-rise warehouse and industrial park.

Mitigating Measures

The Preferred Alternative applies many of the land use concepts of the Distinctive Alternative. While the Preferred and Distinctive Alternatives have similar approaches, the Preferred Alternative further evolves these concepts, drawing ideas from the other alternatives.

There are several major differences between the Distinctive and Preferred Alternatives. The Preferred Alternative has less emphasis on developing high intensity office uses north of the 146th Freeway Interchange than the Distinctive Alternative. However, these uses are still possible in the Plan designation of “Regional Commercial” which maintains the area’s current zoning and fits the established use pattern. The Plan now emphasizes the redevelopment of the 148th Street Interchange as a prominent “gateway” to the community.

While the Preferred Alternative still incorporates the potential redevelopment of an area in the northeast as a business park, it does so much more cautiously, recognizing that the potential impacts of this type of use on neighborhood quality, public facilities, and environmental resources requires more study.

The Preferred Alternative also reduces the potential encroachment of multiple family uses on streams and drainage basins along the coastline, due to potential adverse environmental impacts of such developments. In addition, the Preferred Alternative calls

for careful planning of any future change of uses in the Old Burien area, including the Ruth Dykman Children's Center site.

Conformance with The Growth Management Act (GMA)

Each of the alternatives implements the requirements of the Growth Management Act (GMA). However, each alternative achieves consistency with the requirements in different ways.

The Thriving Alternative promotes compact urban development and supports the reduction of urban sprawl through a strategy of increasing residential densities. However, the alternative does so at a significant environmental and fiscal costs that undermines other important GMA goals, especially those related to capital facilities and environmental management.

The Well Established Alternative reduces overall growth and does the least of all the alternatives to achieve a full balance of the GMA goals. While the Well Established Alternative protects the environment and neighborhood character, it does not promote economic development. It also tends not to accept a balance of growth. Consequently, this alternative does the least to reduce the overall pressure on urban sprawl compared to the other alternatives.

The Preferred Alternative builds on the concepts embodied by the Distinctive Alternative. These concepts deflect growth from areas less suited to accommodate it (i.e. the neighborhoods), and divert growth to the city center where necessary public facilities can best support new development. Especially important to many of the GMA concepts related to transportation and affordable housing is the concept of mixed use. All of the alternatives employ this concept to accommodate more housing in the downtown core. However, the Preferred Alternative does this to a greater extent than the other alternatives.

An important requirement of the GMA is that all cities must plan to accommodate their share of population growth. In King County, a city's allocation of growth is determined by the Countywide Planning Policies process. This allocation is expressed in terms of housing units. According to this process, Burien must accommodate is between 1500 and 2000 new units by the year 2013. The Countywide planning process also sets an allocation for employment growth for Burien – 400 to 500 jobs. All of the alternatives can also easily accommodate the County's housing and employment allocations for the City.

Under the GMA, there is also an evolving standard that urban areas should have at least four net units per acre.⁹ As was noted in **Chapter IV (Table 5.2-2 in Land Use)**, the City's residential areas meet this standard, averaging almost 4.6 units per acre. Most of the residential areas that fall below this standard generally have significant environmental

⁹ The most authoritative statement expressing this standard is found in the final order of the *Central Puget Sound Hearing Board case of Bremerton, et al, v. Kitsap County* on page 50.

constraints (such as the high slopes in the Shorewood area), committed open space uses (such as Seahurst Park) or other committed urban uses, such as in the downtown area.

The impacts of a city planning for less than their housing allocation are relatively well recognized in planning literature. In this case, anticipated housing demand would be shifted to other areas in the region and, if not accommodated elsewhere, could result in higher housing prices due to a potentially constrained supply of land. However, there are also adverse impacts on growth management objectives when a city plans to receive more than its share of growth. These are briefly discussed below:

- In King County, the hallmark of the Countywide planning policies is the promotion of urban centers in designated cities. In south county, the centers include SeaTac, Federal Way, Kent and Tukwila. The urban centers concept is the same growth management strategy used in VISION 2020, the regional plan adopted by the Puget Sound Regional Council. One of the major purposes of these centers is to reduce commuting and other traffic by focusing a high intensity of growth into a few targeted locations. It was also argued that the creation of such centers was necessary in order for high capacity transit to be feasible. Consequently, the success of these centers depends on their attracting residential development as well as employment. If these centers do not attract residential development, then travel between these centers and other residential areas could actually increase, ultimately undermining the entire regional strategy. The residential component may be the most difficult part of these centers to achieve. If there were too much residential capacity planned for in other areas, the countywide planning policies could fail to achieve their goals within the centers, as well as for the region.
- The GMA requires cities to plan for adequate public facilities to support the anticipated growth. If many different cities plan for higher residential capacity than allotted by the County, more total residential capacity will be planned for than will actually be needed region wide. Consequently, more public facilities will be cumulatively planned for and financed, needlessly exceeding the amount required.

The following issues relate to achieving housing allocation objectives *within* the City:

- The Plan focuses multiple family development into the center of the City. Assuming the future housing needs allocation is accurate,¹⁰ allowing more multiple family development elsewhere in the City would reduce the amount anticipated to locate in the center. Consequently, this more dispersed pattern of growth would undermine Plan objectives for promoting growth in the center, reducing the likelihood of being able to promote a more vital downtown and achieve better transportation efficiencies.
- The need to achieve economies in supporting the planned development with the necessary facilities and services is significant, due to the restricted fiscal capacity of the City. Focusing new development into the center of the City will allow planned

¹⁰ A required assumption under growth management.

growth to be more efficiently served. Both the No Action and the Thriving Alternatives would require more improvement of public facilities to support the allocated population than any of the other alternatives, because they allow more growth outside the city center. This is especially true for the potential need to reconstruct City streets.¹¹

- An additional note is appropriate when considering using higher residential growth targets for Burien than currently allotted by the County. The Puget Sound region supports the continued operation of the area's only major commercial airport -- SeaTac International Airport. However, much of the City's growth potential is in areas adversely affected by the airport-related activities. Encouraging greater densities in these areas seems inconsistent with the operation of the existing airport.¹²

Overall, the Distinctive and Preferred Alternatives provide the best "fit" for the Countywide planning policies housing allocations for Burien. The Countywide planning policies include several policies that apply to the issues addressed in the Plan, including:

- 74 policies intended to coordinate land use decision-making between various jurisdictions. Most of these policies relate to coordination between jurisdictions, implementation of the countywide planning policies, management of rural areas and "rural" cities, coordinating the designation of urban growth areas¹³, and designation and management of urban centers. Policies regarding the phasing of urban development are particularly relevant to Burien's Plan. Policy Land Use (LU) 28 requires:

"Within the Urban Growth Area, growth should be directed as follows: a) first to centers and urbanized areas with existing infrastructure capacity; b) second to areas which are already urbanized such that infrastructure improvements can be easily extended, and c) last to areas requiring infrastructure improvements".

Consistent with this policy, the Burien Plan directs growth first to the city center, which in some regards qualifies as "a" and in other regards as "b" (as described above in Policy LU 29). The Plan also reduces growth potentials in other areas where the public facilities are less adequate to support new development. Policy LU 29 requires any phasing to ensure that the housing and employment allocations are accommodated. As noted earlier, this plan does. Policy LU 30 requires that, if services are extended into under served areas, the plan must be capable of supporting urban development. The Plan can be

¹¹ While many of street and roadway needs exist irrespective of new growth, relatively tolerable conditions would be aggravated if some streets or other facilities had be improved to support more growth. Prominent examples include Maplewild and 172nd, and the minor arterials serving the Shorewood area.

¹² This is true for the existing operation of the airport. Extension of the airport by adding an additional runway would directly encroach on established residential areas supported by this Plan.

¹³ All of the unincorporated areas adjacent to the City have been designated by the County as potential urban growth areas. Within this area, cities may designate Planned Annexation Areas (PAA). This Plan does not currently propose any PAAs, but may consider such designation in the future.

amended to support further intensification in the future as easily as it could be formulated to accommodate such hypothetical growth now.¹⁴

Framework Policy 17, and supporting policies LU 63 through 65, set basic policy for designating Urban Activity Centers. Under these policies, Burien's qualifies as an activity center since it is characterized by an array of commercial development housing public facilities and public open spaces, frequent transit services, a pedestrian orientation, an emphasis on superior urban design, and disincentives for single occupancy vehicle usage. Supporting Countywide planning policies that encourage transit service to these activity centers are consistent with Burien's land use and transportation policies.

Policies LU 66 through 74 address urban development outside of centers. Policies LU 66 through 68 address housing and employment allocations. Policy LU 69 addresses urban infill, requiring cities to develop planning and design processes that encourage infill and enhance the existing community character. Much of Burien's planning process has sought to achieve an appropriate degree and character of infill that enhances and not detracts from community character and values. This Plan promotes infill in its activity center, while conserving the existing character of its single family neighborhoods. Infill designed and located inappropriately with the City's existing character would not only conflict with other policies but would also erode the quality of these neighborhoods, as perceived by current residents. Consequently, inappropriate infill would lead to neighborhood instability.

Policy LU 66-b) requires cities to establish minimum density requirements in each residential zone. The Preferred Alternative does not implement this policy directly. The City is already extensively subdivided, and environmental or service constraints severely limit further subdivision opportunities. These limitations and constraints require appropriate site specific review of each proposal on a case by case basis, making the application of the minimum density approach impractical. Similar constraints affect the areas zoned for multiple family uses under the Plan. Also, a too literal application of this policy would require the City to plan for greater public facility and services than it can realistically support.

Policies LU 70 through 74 address the development of business parks and offices, encouraging such uses to locate in areas served by transit. The Plan is generally consistent with these policies since it directs most of these uses to the city center or along the arterials where transit service is already provided.

Employment

Impacts of the Alternatives

Through appropriate economic development programs, each of the alternatives would permit and encourage continued employment growth in the City. Each alternative envisions far more employment growth than currently allocated under the Countywide

¹⁴ This policy is more intended to address how green fields are divided prior to future potential urbanization, than in addressing intensifying the use of existing urban areas.

Planning Policies. However, the potential growth rates are consistent with past growth over the last two decades. An analysis of the employment capacity of each alternative was prepared and the results¹⁵ are illustrated in Table 5.2-3 – Forecasted Employment.

Table 5.2-3. Forecasted Employment

Land Use Alternatives	Employment			
	Retail	Services/Education	Other	Total
1995 Existing Land Use	3,690	7,221	1,876	12,787
2020 Well-Established Community Alternative	5,295	8,683	2,333	16,311
<i>Increase/Decrease compared to Existing</i>	<i>+1,605</i>	<i>+1,462</i>	<i>+457</i>	<i>+3,524</i>
2020 Distinctive Community Alternative	5,589	12,032	3,829	21,450
<i>Increase/Decrease compared to Existing</i>	<i>+1,899</i>	<i>+4,811</i>	<i>+1,953</i>	<i>+8,663</i>
2020 Thriving Community Alternative	6,283	14,885	3,187	24,355
<i>Increase/Decrease compared to Existing</i>	<i>+2,593</i>	<i>+7,664</i>	<i>+1,311</i>	<i>+11,568</i>
2020 Preferred Alternative	5,726	10,272	4,271	20,211
<i>Increase/Decrease compared to Existing</i>	<i>+2,036</i>	<i>+3,051</i>	<i>+2,395</i>	<i>+7,424</i>

The Well Established Alternative is designed to maintain the status quo pattern of growth. It results in the strengthening of the existing residential neighborhoods, increases the quality of multifamily areas, and revitalizes the downtown area. Land use strategies include infill and redevelopment of lots and vacant areas, as well as renovations to existing business structures. The Well Established Alternative results in the smallest increase in both residential and commercial uses, with an estimated increase by 2020 of 27 percent in households and 28 percent in employment over 1995 levels. The employment growth is primarily in the retail/services sector, focused along 1st Avenue S and in the downtown area south of SW 148th Street. Existing retail areas along Ambaum Boulevard SW are also programmed for future employment growth as part of this alternative.

Under the Distinctive Alternative, the highest growth in residential units would occur in areas currently zoned for multifamily development and located near the downtown service region. The downtown area is planned for commercial uses and mixed-use developments. This alternative also allows for some housing to be constructed in the downtown area, above stores and shops, to provide an alternative for people who want to live within walking distance of downtown services. Specifically, this alternative includes

¹⁵ See *Background Report No. 14, Development Capacity* for a discussion of the methodology. While this report addresses the existing capacity, similar methods were applied to each of the alternatives. The methodology was varied only to reflect the more generalized character of the alternatives and was done on the basis of estimating the allowable density under each alternative for each “Burien Analysis Zone”. The Well Established Alternative is the same as the No Action or existing capacity. Also the “redevelopment factor” (the ratio of improved value to land value) for commercial redevelopment used in the methodology was varied in each alternative: .75 in Distinctive and .9 in Thriving. .9 was also used in the Preferred reflecting the increased accent on mixed use opportunities.

a small-scale hotel and meeting center at the SW 148th Street/1st Avenue S intersection. Along Des Moines Memorial Drive, this alternative designates a business park incorporating low intensity industrial and/or warehouse uses. This is intended to promote development in the northeastern part of the City. Compared to the first alternative, there is over twice the growth in employment, with the largest increase in the services sector. The Distinctive Alternative also has the greatest increase in the “other” land use designation, which includes wholesale trade anticipated in the northeastern area of the City.

The Thriving Alternative provides the greatest potential for overall economic growth in the downtown commercial area. The alternative is designed to allow the greatest growth in a manner that is consistent with the Vision. The Thriving Alternative promotes large commercial and retail development at major intersections along SR 509. These uses could include a large hotel with conference facilities, retail, and office uses. The alternative also allows for medical-related growth near the hospital.

Under the Thriving Alternative, the downtown area would also be a major focus for economic development, with low-rise commercial, retail and office growth. The transit center would become a focal point for high-density retail and commercial services.

Mitigating Measures

Analysis of these alternatives noted several potential issues affecting the feasibility of achieving the anticipated job growth.

First, the development of a warehouse business park in the northeast requires careful planning in order for it to be feasible and avoid potential adverse impacts on public facilities, adjacent neighborhoods and environmental quality. Consequently the Preferred Alternative designates this area as a “Special Planning Area” in order for this planning and analysis to occur, prior to development.

Second, the feasibility of a large area of intensive office parks in the vicinity of the two major freeway interchanges in the Thriving Alternative, and the 148th interchange in the Distinctive Alternative, may not be realistic given future market trends in this area. Over planning for these uses could result in over committing financial resources for supporting public facilities. Consequently, these options were reduced in the Preferred Alternative. Instead, the Preferred Alternative envisions a more targeted promotion of this use at the 148th Street/1st Avenue S interchange. If this proves successful, future plan amendments could consider expanding this use, along with appropriate public facility improvements.

A preliminary capacity analysis indicates that the Preferred Alternative can accommodate a total of 20,211 jobs by the year 2020 without the development of the business park in the northeast. While this is less than the Distinctive and Thriving Alternatives, it is probably a more realistic target within the 20-year time frame of the plan. Figure 5.2-3 depicts the distribution and amount of existing and potential new job growth within the City by Burien Analysis Zone (BAZ) under the Preferred Alternative.

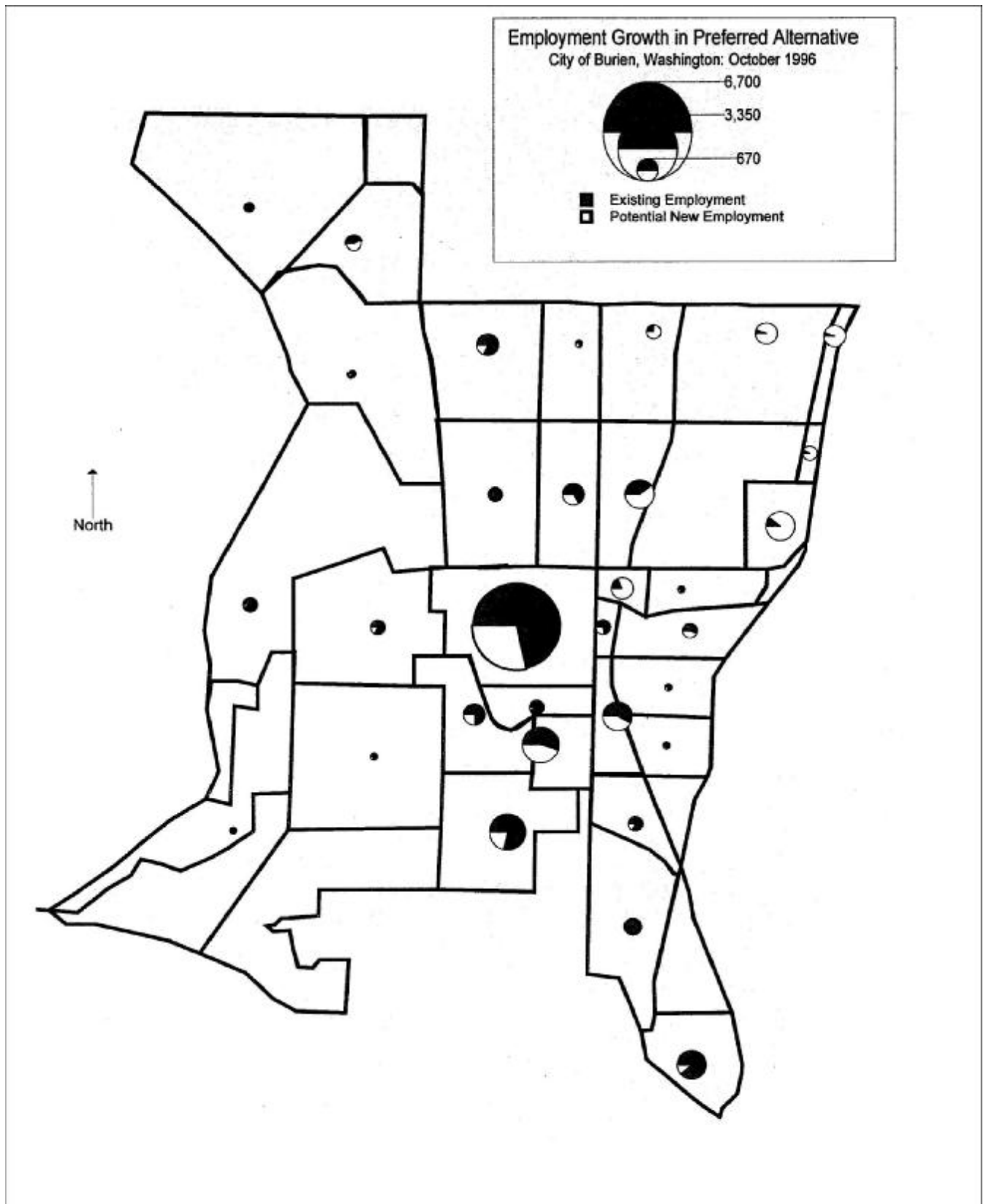


Figure 5.2-3 - Employment Growth in Preferred Alternative

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map3.pdf

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Housing

Impacts of the Alternatives

A housing capacity analysis was conducted on each of the alternatives. Available Practical Capacity for Housing Units During Planning Period¹⁶ (Table 5.2-4) provides the results of this capacity analysis for each of the planning Alternatives. Under the methods applied, the No Action Alternative is represented by the existing zoning.

Table 5.2-4. Available Practical Capacity for Housing Units during Planning Period by Alternative and Current Zoning

Residential (Number of Dwelling Units)	1995 Existing Land Use	2020 Well Established Community	2020 Distinctive Community	2020 Thriving Community	2020 Existing Zoning	2020 Preferred Community
Single Family	7,450	9,822	9,174	11,227	11,227	9,348
Increase from 1995		2,372	1,724	3,777	3,777	1,898
Multiple Family	4,931	5,800	6,548	6,660	6,854	5,914
Increase from 1995		869	1,617	1,729	1,923	983
Downtown 'Mixed Use'	106	106	409	106	206	409
Increase from 1995		-	303	0	100	303
Other	240	240	240	240	240	240
TOTAL	12,727	15,968	16,371	18,233	18,527	15,911
Increase from 1995		3,241	3,644	5,506	5,800	3,184

FULL RESIDENTIAL ZONING POTENTIAL

Residential (Number of Dwelling Units)	1995 Existing Land Use	Practical Forecast 2020 Existing Zoning	Maximum Forecast 2020 Existing Zoning	Practical Forecast 2020 Preferred Community	Maximum Forecast 2020 Preferred Community
Single Family	7,664	11,270	12,939	9,685	10,668
Increase from 1995		47%	69%	26%	39%
Multiple Family	4,959	6,882	11,949	5,742	6,511
Increase from 1995		39%	141%	16%	131%
TOTAL*	12,623	18,152	24,888	15,427	17,179
Increase from 1995		44%	97%	22%	36%

* Excludes 104 Units in residential uses but not in residential zones.

Practical Estimate Based on:

In single family zones the number of additional lots that can be created within existing lot configurations

In multiple family zones the number of units that could be added on lots whose improvement value/Land value is less than 0.9.

Maximum Estimate is based on the net area in each zone multiplied by the allowable density in the zone.

¹⁶ See *Background Report No.14, Development Capacity* for a discussion of the methodology. While this report addresses the existing capacity, similar methods were applied to each of the alternatives. The methodology was varied only to reflect the more generalized character of the alternatives and was done on the basis of estimating the allowable density under each alternative for each Burien Analysis Zone. Also the "redevelopment factor" (the ratio of improved value to land value) for multiple family redevelopment used in the methodology was varied in each alternative: .5 in Well Established .75 in Distinctive and .9 in Thriving. .9 was also used in the Preferred reflecting the increased accent on mixed use opportunities.

Table 5.2-4 is divided into two parts. The top part estimates the land use and housing impacts of each of the alternatives. These impacts are estimated based on the potential for short platting and redevelopment within the current lot configurations and development patterns now found in the city. This “practical” approach to estimating capacity estimates the potential for additional single family development on the basis of how currently platted lots may be divided under each alternative. For example, under existing R6 zoning, the methodology determines how many new 7,200 square foot lots can be created within existing lot; e.g. two lots can be formed in a 14,400 square foot lot, and three lots may be formed in a 21,600 square foot lot. In the case of multiple family housing, the redevelopment potential of existing lots was estimated. A lot was thought to be redevelopable within the 25 year planning period if the current value of improvements is less than 90% of the value of the land.

The bottom part of the table provides a more direct comparison of the development potential between the existing zoning ordinance and the proposed plan. It compares only the current and proposed residential zones. It includes the “practical” capacity estimate described above, as well as a “potential” capacity. Potential capacity is based on the potential complete redevelopment of lots within the city to the maximum allowed under the current and proposed zoning ordinance. The ultimate build out of the city (which would probably occur at a time beyond the planning horizon for this plan) would likely lie in between the practical and potential capacity.

Implementation of each planning alternative would significantly increase the local supply of housing opportunities in the community. The Thriving Alternative and No Action Alternative (existing zoning) supply the most potential new units, adding a total of 5,500 to 5,800 units under the practical approach to estimating capacity. The Well Established Alternative supplies the least new units, adding a total of 3,135 new units. Under the Thriving Alternative, the supply of housing will increase by about 43% while the Well Established Alternative increases by 25%. The distribution of new housing types would remain relatively the same under both the Well Established and Thriving Alternatives as the current distribution -- about 58% to 62% of the housing units would be single family, while 36% to 37% would be multiple family units.

The housing capacity of the Thriving Alternative would be equivalent to the No Action Alternative since it maintains current uses allowed under the current zoning ordinance. Consequently the Well Established Alternative reduces the housing capacity of the city the most from under the current zoning (No Action Alternative), by 2,665 units or 14%.

While the Distinctive Alternative has lower growth rates than the Thriving and No Action Alternatives, it increases the total supply of existing housing by 23%. The preferred community, as represented by the proposed plan, has a moderate potential growth rate of 28%, approximately equal to most long range county forecasts of population growth. Approximately 57% of the housing units in 2020 may be single family units, close to the 58% today.

All of the alternatives envision a diversity of housing unit types in a range of densities. The accent on downtown mixed use development in the Distinctive and Preferred Alternatives add somewhat more diversity in housing choice.

Mitigating Measures

The Preferred Alternative (as well as all of the other alternatives) can easily accommodate the City's share of the region's anticipated need for housing as expressed by the housing allocation under the Countywide Planning Policies (1,500 to 2,000 units by the year 2013). The Preferred Alternative accommodates 2.4 times the low range of the allocation, while it accommodates 1.8 times the higher range. Figure 5.2-4 depicts the distribution and amount of existing housing units within the City by Burien census tracts by type under the Preferred Alternative. Figure 5.2-4 also compares the capacity for new housing growth under existing zoning, with the capacity for growth under the Preferred Alternative's proposed land uses.

While the Preferred Alternative reduces housing growth and allowable densities in single family neighborhoods to avoid adverse impacts on environmental hazards, neighborhood quality and public facilities, the alternative mitigates this by accommodating growth in the downtown area. The Preferred Alternative increases the accent in the Distinctive Alternative on mixed uses.

The bottom part of Table 5.2-4 compares the residential zoning capacity in residentially zoned areas between the proposed plan and the existing zoning ordinance. As noted the proposed plan significantly reduces the ultimate residentially zoned capacity of the city for both single family and multiple family dwellings from a maximum of 24,888 units to 17,179. While the reduction in the practical capacity is also significant, it is less dramatic dropping from 18,152 units to 15,427.

Impact on Housing Affordability

The King County Countywide housing policies challenge local governments to accommodate a share of the low and lower income housing needs of the region. The policies set these "shares" at 20% of the city's housing allocation (between 319 and 399 units) for households earning less than 50% of the county median and 17% (271 and 339 units) for households earning between 50% and 80% of the County median household income.

As discussed in Chapter IV, Existing Conditions, the city has significant portions of its housing stock in affordable housing. Lower value units tend to dominate the multiple family market. Over one-third of the single family units sold in the Burien housing market are available to households earning less than 80% of the average household income, while nearly one out of ten units are available to those earning less than 50% of the median. Among rental units it appears, on the basis of the value of units, that over three-quarters of the rental units should be available to households earning less than 50% of the county median for all households. If these proportions continue into the future the city could easily accommodate its share of the regional need as established by the

countywide policies¹⁷ (even if the city is successful in increasing its share of quality multiple family dwellings as envisioned in many of the policies of the Preferred Alternative).

Whether these proportions continue is a function of housing market. If, on average, housing prices are stable over time, then the relative distributions of housing prices may also be expected to be stable. Newer homes will generally have higher values and older homes lower relative values. The new homes of today become the older homes of tomorrow. However, if average prices tend to increase, it is likely to reflect an increase in value at all levels.

The free market forces that determine housing prices are the result of a complex regional supply and demand dynamic that makes it difficult to anticipate its affect on the local housing market. On one hand population growth adds demand, but it also stimulates the construction of new units adding to the supply. Some argue that the Growth Management Act will drive up prices by restricting land supply. However, many jurisdictions have responded to this by increasing densities, thereby increasing the potential number of new units available within the urban area. Demographics also has an influence. As the baby boomers age and start to become empty nesters, the demand for single family dwellings may begin to fall. This demographic shift may increase the demand for multiple family units within the overall market.

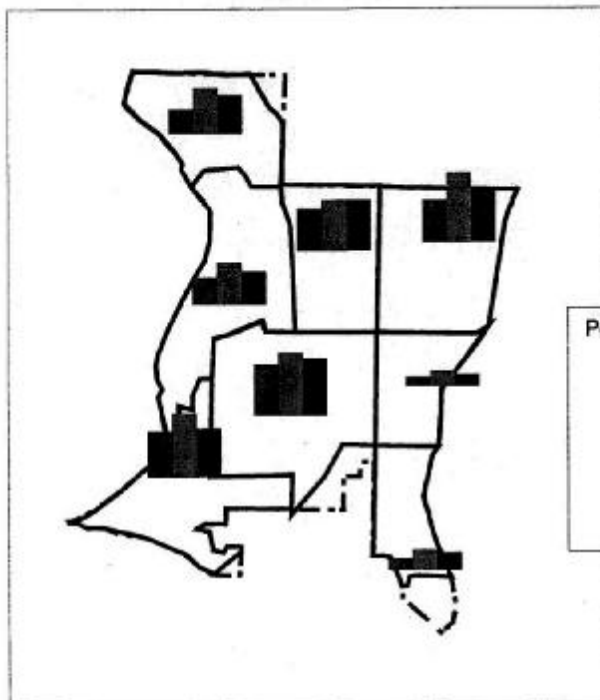
One way to anticipate future trends is to observe the effects of supply and demand on housing prices over the last two decades. Figure 5.2-5 compares the increase in average house price compared to average household income. While this seems to show that over the long term housing is becoming more unaffordable, this first impression is misleading. Figure 5.2-6 takes a closer look at the relationship. This figure computes how much of the median income would be needed used to make house payments on the median priced house each year. As illustrated, the proportion of income that would be required for house payments actually on the average been declining during the last two decades. A large part of this is due to the effect of declining interest rates over this time period. When the effect of increasing incomes is factored in (as reflected by the line that tracts the house payment as a percent of median income) the trend has been cyclical, and declining.

Transportation

Impacts of the Alternatives

The planning process will separately analyze the impacts of each of the alternatives on the City's transportation system. This analysis is conducted in two phases. The first consists of analyzing the impacts of the Well Established, Distinctive, and Thriving Alternatives. The City's transportation consultants conducted this analysis in the Spring

¹⁷ Recent studies conducted by the City under a grant from the State Legislature found that increasing air traffic at the airport would depress property value growth within the city relative to the rest of the county. Such an impact does have the side effect of increasing the affordability of housing relative to the county averages. See SeaTac International Airport Impact Mitigation Study: Initial Assessment and Recommendations, City of Burien, Washington, February 1997.



Potential Single Family Units in Residential Zones
City of Burien, Washington: October 1997



- Existing Single Family Units
- Potential SF Units in Under Current Zoning
- Potential MF Units With Plan

Potential Multiple Family Units in Residential Zones
City of Burien, Washington: October 1997



- Existing Multiple Family Units
- Potential MF Units Under Current Zoning
- Potential MF Units Under Plan



Figure 5.2-4 - Residential Units in Residential Zones

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map4.pdf

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Figure 5.2-5

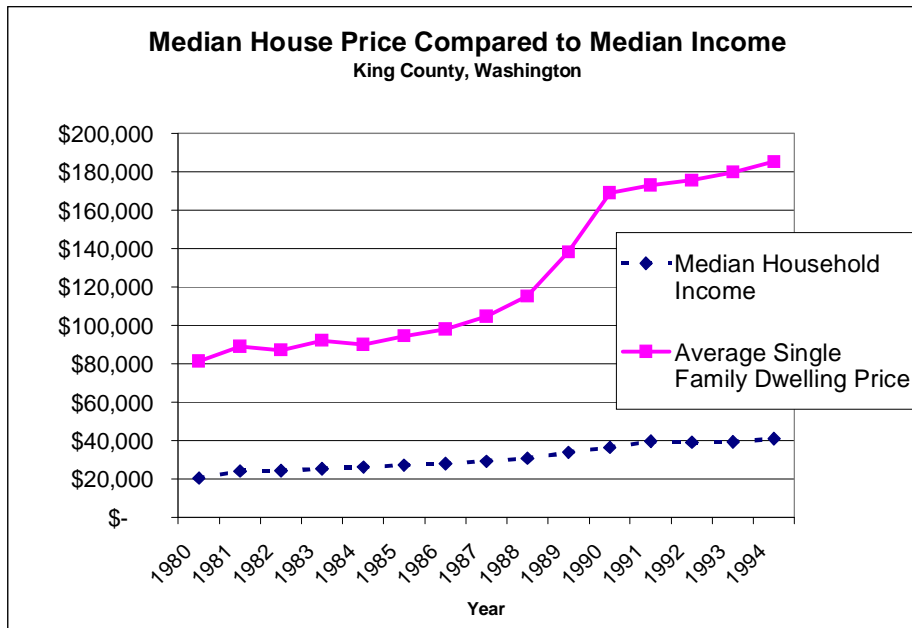
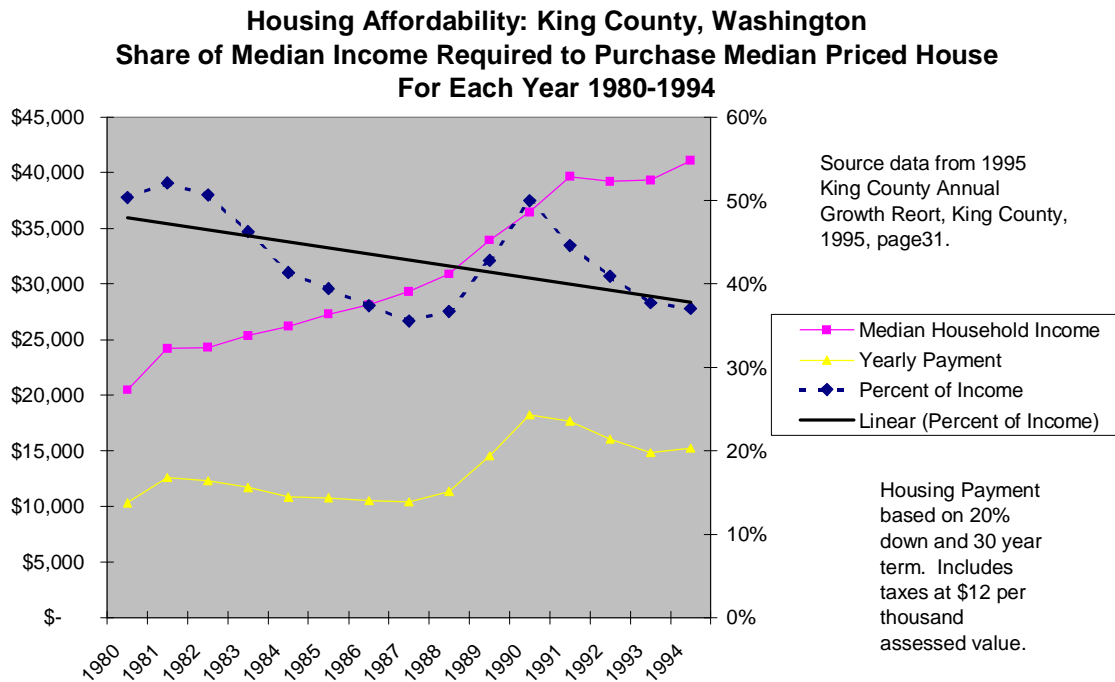


Figure 5.2-6



of 1996. The second analysis will compare these impacts to the impacts of the preferred alternative. Although this second analysis is not yet completed (as of the preparation of this draft of this plan),¹⁸ this discussion will extend the implications of the first analysis to anticipating the impacts that may be produced in the Preferred Alternative. The first report, *City of Burien, Comprehensive Plan Transportation Element Study Report Partial Submittal: Travel Forecasts and Alternatives Analyses*, contains a detailed discussion of the results of this analysis and the methodology used.

Table 5.2-5, City of Burien Trip Generation Summary, provides a summary of the estimated PM peak hour trip generation for the study area for each of the alternatives. As would be expected, the Thriving Alternative would result in the highest growth in PM peak-hour trips (46 percent) and the Well Established Alternative the lowest (16 percent). In terms of annual growth in trips, the alternatives range from about 0.6 percent per year for the Well Established Alternative to 1.5 percent per year for the Thriving Alternative. For comparison purposes, historical growth rates, as represented by traffic counts compiled by King County (*Historical Traffic Counts 1984–1994*, King County, Department of Public Works), are generally slightly less than 1.0 percent per year.

Table 5.2-5. City of Burien Trip Generation Summary

Condition	PM Peak Hour Trips		Total	% Increase
	From Burien	To Burien		
1995 Existing	12,200	12,600	24,700	—
2020 "A Well-Established Community"*	13,800	15,000	28,700	16%
2020 "A Distinctive Community"*	15,600	16,000	31,600	28%
2020 "A Thriving Community"*	17,900	18,200	36,000	46%

* 2020 Trip generation estimates have been adjusted to reflect increased regional and local Transportation Demand Management programs and spreading of the peak hour traffic (consistent with previous SR 509 analyses). This results in a 12 to 13 percent reduction in future peak hour traffic forecasts.

The mix of land uses in all of the alternatives provides a fairly balanced ratio of inbound versus outbound trips for the study area, which is a continuation of the current travel patterns. A mix of land uses also can result in shorter average trip lengths and total vehicle-miles travel. The Well Established Alternative option is the least balanced of the three alternatives, with 52 percent of the trips inbound to Burien during the afternoon peak hour of travel. The Preferred Alternative would most likely generate a number of "trips to Burien" slightly greater than the Well Established Alternative, and a number of "trips from Burien" very similar to the Distinctive Alternative.

The traffic impacts of the alternatives have been estimated on the basis of the housing and employment estimates associated with each alternative. As part of this process, the potential housing units and employment were allocated into small geographic areas known as Burien Analysis Zones (BAZ). A computer program then can estimate the potential traffic on each arterial if those housing and employment forecasts actually

¹⁸ This analysis will be conducted on the preferred alternative as it may be modified after the town meetings in November of 1996.

occurred. The methodology for this process is described in Background Report 25. Figure 5.2-7 presents the estimated peak hour traffic volumes estimated in this fashion.

These traffic forecasts are used to estimate the need for future street improvements. To accommodate the growth anticipated for each alternative and to respond current needs, the planning program defined a preliminary list of basic transportation improvements for each alternative. Preliminary cost estimates, in 1996 dollars, were also developed in order to identify the range of total transportation system needs over the life of the City's Comprehensive Plan.

This list of basic transportation improvements consists of three primary elements. The first set of improvements includes major widening or reconstruction of arterial roadways or intersections to increase vehicle capacity. These improvements are specific to the land use alternatives and were derived from the evaluation of the 2020 travel forecasts.

The second set of improvements includes community paths and other amenities that the City envisions. The type and extent of these improvements are also tied to a specific alternative. However, in developing a preferred plan, the City will likely adjust the specific program of pathways and amenities as the plan is finalized.

The third type of improvements includes safety and operational enhancements that are required to accommodate traffic associated with greater growth in a safe manner on minor arterials and neighborhood arterial streets. These improvements are needed to bring these roadways up to design standards appropriate for their existing functional classification, volumes, and speeds. While these improvements would be desirable under any of the land use alternatives, they are considered necessary to accommodate any significant growth in the affected neighborhoods. In many cases, additional growth would aggravate needs that may be capable of being tolerated under existing conditions.

In addition to these three types of basic needs, there is an underlying need to upgrade most of the city streets to appropriate standards. A significant aspect of these types of improvement needs is related to the character of local streets in many neighborhoods. Most local streets, especially those west of Ambaum and in the northeast, were constructed to rural standards without curb, gutter and sidewalks and other safety design standards intended to support urban levels of development and traffic. Increasing densities to urban levels in these areas, as would be permitted under the Thriving and No Action Alternatives, should require reconstruction of these streets to appropriate urban level design standards. The lower density growth envisioned in the other alternatives would make these improvements less critical. Cost of making these upgrades has been estimated to be almost \$120,000,000 (this estimate does not include the costs described above). This estimate is based on applying the current city street standards (adopted from the county) to the entire street network. The preferred alternative envisions adjusting street standards in many areas of the city by matching the street standard to the planned densities. Urban standards would apply in the higher density areas, but lower standards would apply in lower density areas. Using this approach these costs may be reduced down to \$60,000,000. While the planning process did develop the Well-Established and

Distinctive Alternatives to this level of detail, the approach used in the Preferred Alternative would be appropriate in those cases. Since the existing conditions zoning pattern would be primarily of a higher density urban character, costs associated with this alternative would be similar to the costs associated with the Thriving Alternative.

The total cost estimate ranges for roadway improvement elements are summarized by alternative in Table 5.2-6: Summary of Preliminary Improvement Costs. These are order-of-magnitude planning-level estimates and do not include costs for right-of-way acquisition or improvements to the drainage system. The basic improvement cost estimates range from nearly \$38 million to over \$48 million over the 24-year life of the plan. The largest costs are for the major roadway improvement element. The major roadway improvement element accounts for 55 to 60 percent of the total costs for each of the Well Established and Thriving Alternatives. Under the Distinctive Alternative, the basic major roadway improvement account for approximately 50 to 55 percent of the total basic costs.

Table 5.2-6 Summary of Preliminary Improvement Costs – City of Burien

Improvement Category	Well-Established Community	Distinctive Community	Thriving Community
BASIC IMPROVEMENT COSTS			
• Major Roadway Improvements	\$22.8 million	\$23.7 million	\$24.9 million
• Community Paths/Amenities	\$4.8–\$6.5 million	\$8.9–\$12.5 million	\$6.1–\$9.4 million
• Other Safety/Operational Enhancements	\$10.1–\$11.9 million	\$10.1–\$11.9 million	\$10.1–\$11.9 million
Total Basic Cost Estimates	\$37.7–\$41.2 million	\$42.7–\$48.1 million	\$41.1–\$46.2 million
Street Upgrades to Appropriate Standards	\$50-\$60 million	\$60-\$70 million	\$120 million

Notes:

- All cost estimates in 1996 dollars, exclusive of right-of-way acquisition or major drainage system improvements.
- Exclusive of costs for WSDOT, SeaTac, Normandy Park improvements.

The above costs include only City of Burien projects, exclusive of costs for projects under the jurisdiction of the Washington State Department of Transportation (WSDOT) and the cities of SeaTac and Normandy Park. Major improvements under these jurisdictions are important to the City of Burien’s transportation system. Especially critical is an estimated \$35 million for revision of major interchanges at SR 518/SR 509 under WSDOT responsibility. This interchange is the primary route connecting Burien to the rest of the Puget Sound Region. City of SeaTac and Normandy Park improvements to Des Moines Memorial Drive and 1st Avenue S, respectively, are also important from capacity, safety, and route continuity perspectives.

The City’s ability to finance the identified needs is related to the type improvement. Major roadway improvements have the greatest potential ability to be funded. They can be funded by local sources, but may also be competitive for outside financial assistance as needs grow. In many cases, the need for these improvements may be created by specific new developments, allowing the City to negotiate developer financing of a significant part of these costs.

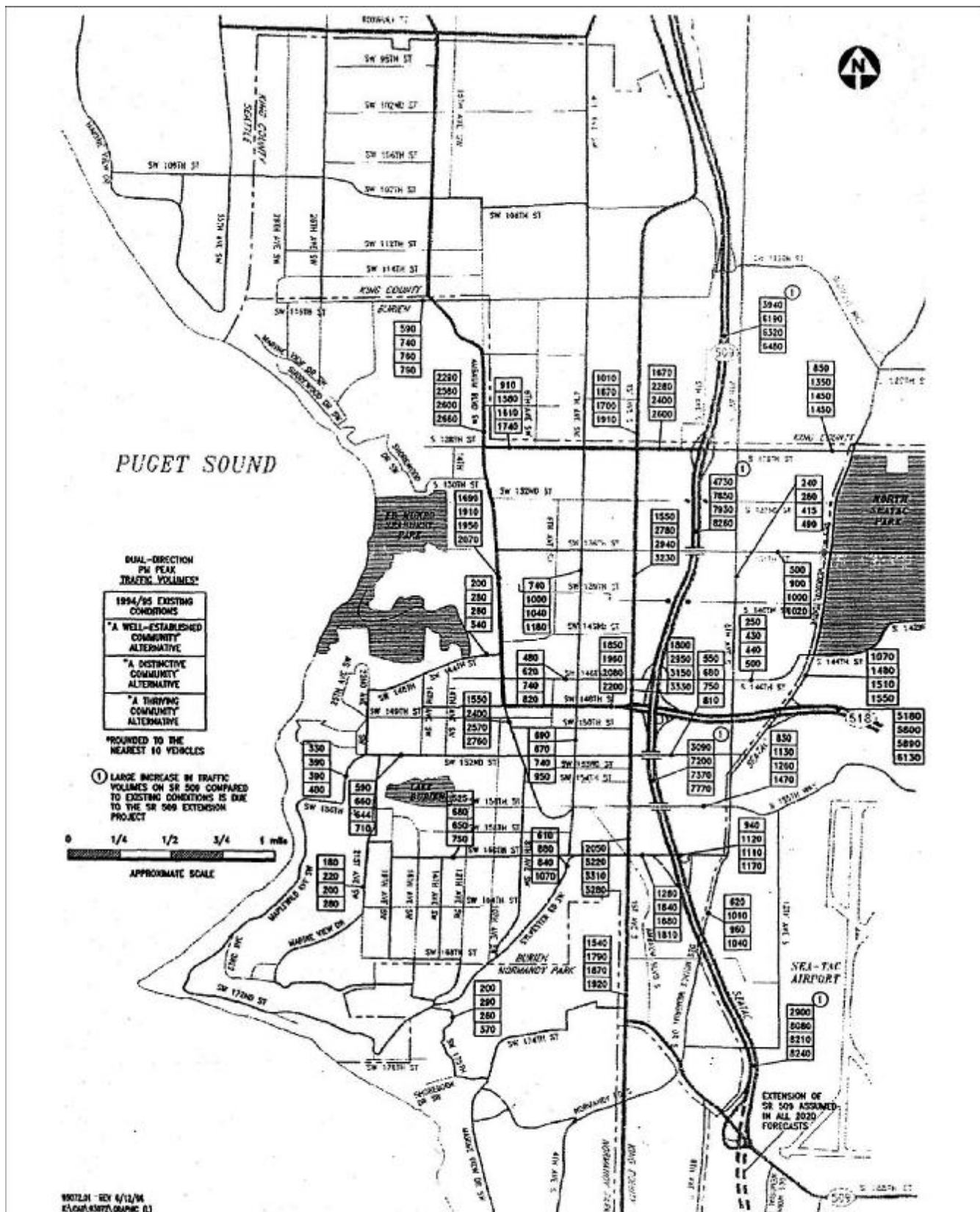


Figure 5.2-7 - PM Peak Traffic Volume for the Alternative

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map5.pdf

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Local operational enhancements can are usually the most difficult to fund. These improvements are almost exclusively financed out of local funds. Generally, they are not competitive for grant financing. The small incremental type of growth that would occur in affected areas limits the potential for developer financing. While Local Improvement Districts are a potential financial mechanism, they are generally only feasible where local residents perceive a significant need. This not the case for most of these projects.

The ability to fund amenity improvements lies somewhere in between the ability to fund major roadway improvements and safety/operational enhancements. In some cases the amenities, such as the boulevarding of portions of 1st Ave. S., can be incorporated in grant or developer financing. In other cases, amenities may be incorporated into park and open space proposals for external funding. Other times, local improvement districts may be appropriate for providing pedestrian improvements, especially if related to safety improvements near schools. Also, developer financing, even on an incremental basis can effectively finance pedestrian improvements.

Mitigating Measures

The Preferred Alternative integrates the land use decisions with the financial potential associated with funding the identified transportation improvements. Traffic forecasts for the preferred alternative have been prepared in the same manner as the traffic forecasts for the planning alternatives described above. These traffic forecasts are illustrated on Figure 5.2-8 2020 PM Peak Hour Travel Forecasts.

The Preferred Alternative focuses potential growth into areas capable of being served by system improvements that would be required by any of the alternatives. Substantial reductions in costs from either existing policy (as adopted in the King County road standards) or the Thriving Alternative are provided in the preferred alternative by matching street standards to the planned residential densities. This reduces the potential costs of street upgrades from 120 million dollars to approximately 60 million. The Preferred Alternative also minimizes the growth potential in areas where it might be difficult to finance necessary local enhancements.

Improvement projects addressing the basic needs summarized on Table 5.2-7 have been identified to mitigate the transportation impacts of the Preferred Alternative. These improvement projects are specified on Table V in Chapter III, Capital Improvement Program. The Capital Improvement Program addresses the financial strategy that will be used to fund these improvements.

Implementation of these projects would result in the levels of service portrayed on Figure 5.2-9 2020 Levels of Service With Recommended Improvements. These levels of service are consistent with Policy TR 1.1 that establishes the acceptable levels of service under this plan.

Table 5.2-7 Summary of Preliminary Improvement Costs – City of Burien

Improvement Category	Preferred Alternative (Preliminary)
BASIC	
• Major Roadway Improvements	\$22.8 to \$23.7 million
• Community Paths/Amenities	\$6.1–\$9.4 million
• Other Safety/Operational Enhancements	\$5-\$8 Million
Total Basic Cost Estimates	\$33.2-\$37.4 million
Street Upgrades to Appropriate Standards	\$55-\$65 Million

Notes:

All cost estimates in 1996 dollars, exclusive of right-of-way acquisition or major drainage system improvements.
 Exclusive of costs for WSDOT, SeaTac, Normandy Park improvements.

The Preferred Alternative contains transportation policies designed to minimize the need for new improvements through reducing the reliance on the single occupancy vehicle. Included in the Plan are policies that allow the City to identify and assess an appropriate share of a development's costs to mitigate impacts on the City's transportation system.

The land use policies of the Preferred Alternative also promote accommodating the City's allocation of growth in a pattern that minimizes transportation needs. Particularly important among these policies is the promotion of mixed use developments.

The preferred alternative is consistent with the policies of the Regional Transportation Plan as adopted by the Puget Sound Council of Governments. These policies accent four major policy areas:

- Optimize and Manage the use of Transportation Facilities and Services

The Transportation Element utilizes the existing transportation network to support the comprehensive plan. In itself, the land use plan does not require nor does provide for any additional new facility. The Transportation element builds on the existing network by enhancing capacities where needed to accommodate the traffic forecasts. The transportation network envisioned in this plan is multimodal accenting transit, auto and pedestrian linkages.

- Manage Travel Demand Addressing Traffic Congestion and Environmental Objectives

The transportation policies accent developing opportunities to reduce travel demand by focusing new denser development into the city center which can be more efficiently served by transit, by planning a city wide pedestrian path system, and through demand management policies and programs. The plan also requires appropriate environmental reviews of proposed transportation facilities and services.

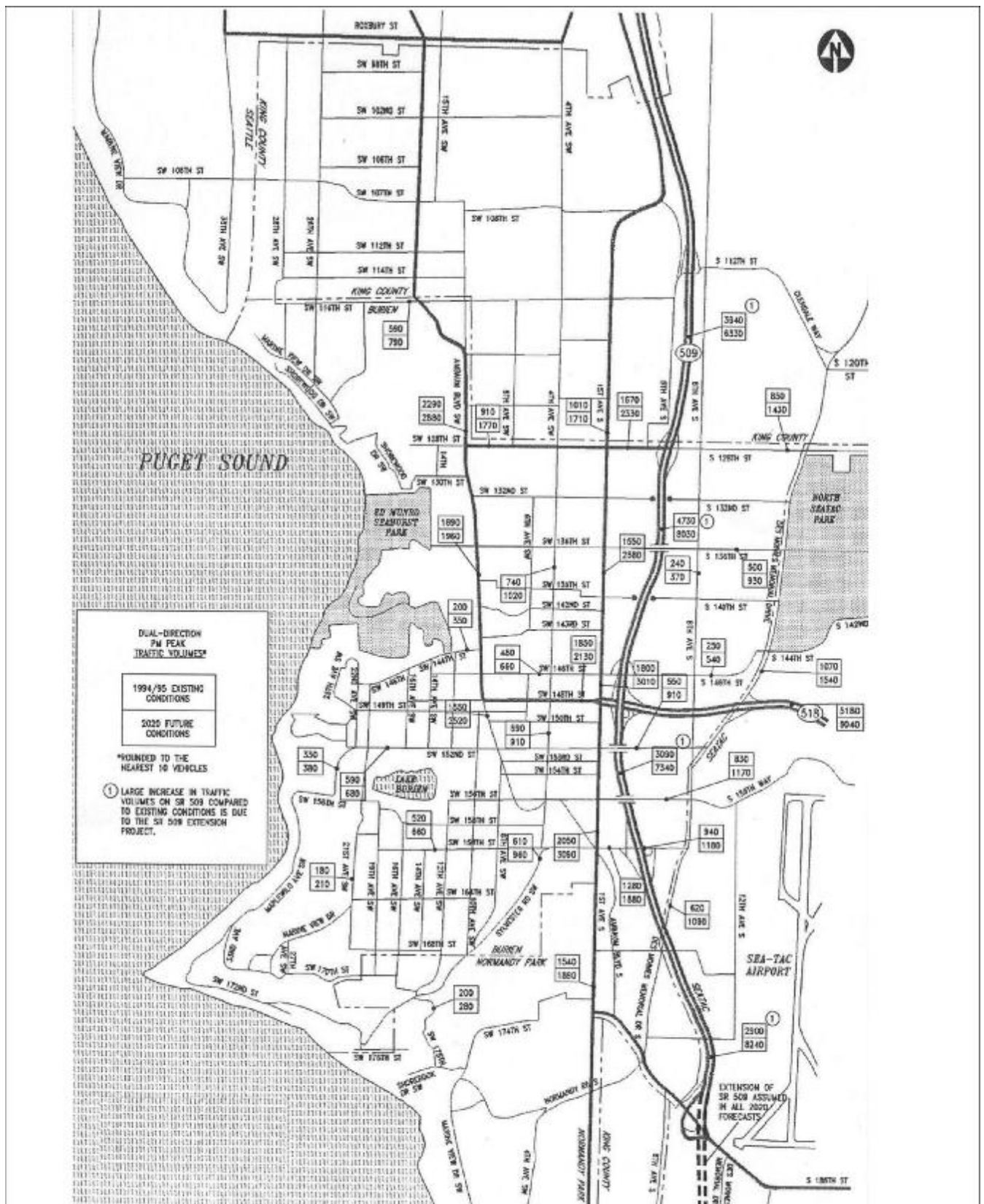


Figure 5.2-8 - PM Peak traffic Volumes: Existing conditions and 2020

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/m6p6.pdf

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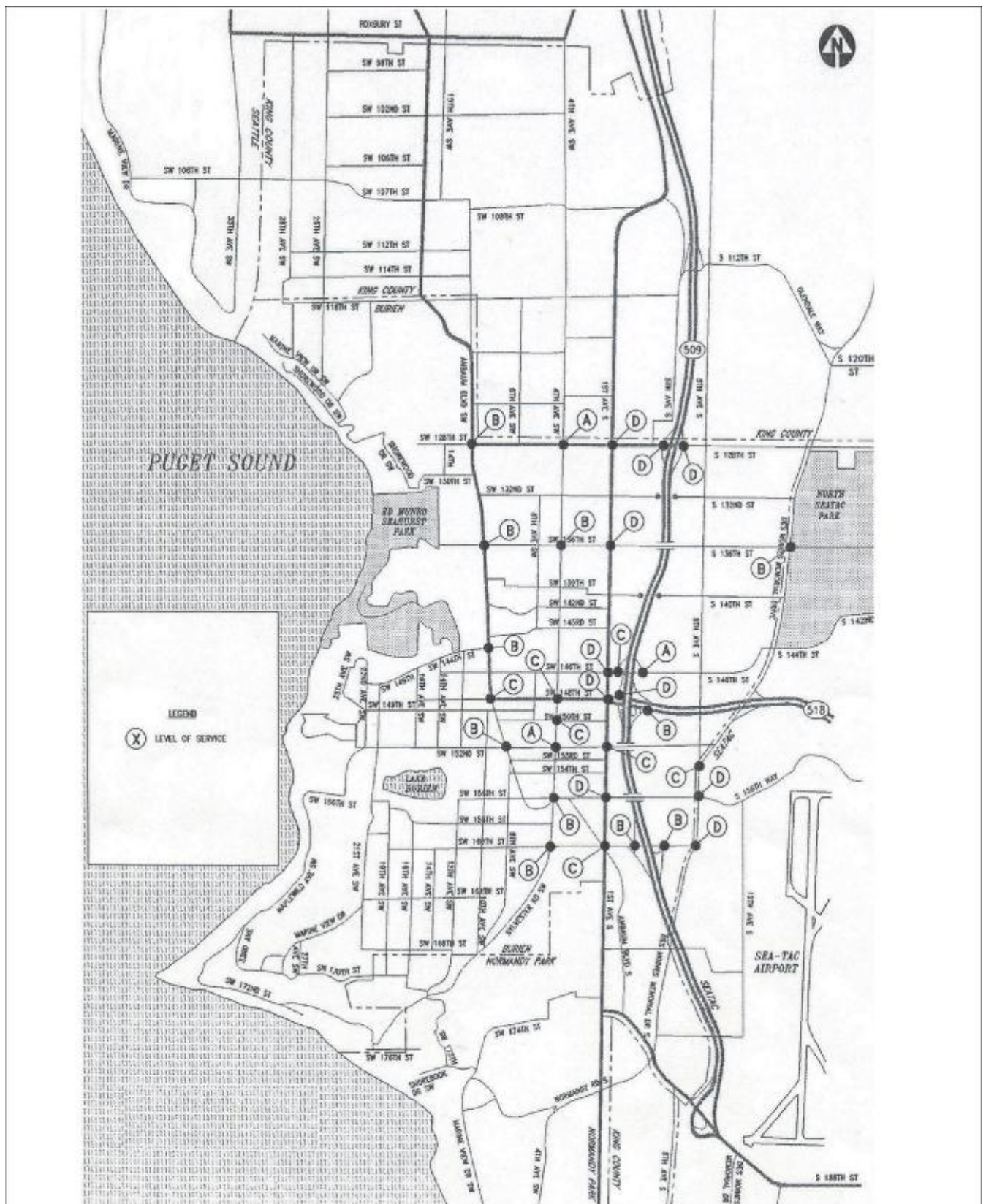


Figure 5.2-9 - Levels of Service

March 1997



Source: City of Burien 2003 Crit_Comp/Graphics/Figures/FinalPDFs/map 7.pdf

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- Focus Transportation Investments Supporting Transit and Pedestrian-Oriented Land Use Patterns

The land use plan supports the development of a transit hub in the downtown area of the city, linked to higher density residential and commercial uses by an improved pedestrian system. This plan has been coordinated with METRO planning to increase routes and connections with the RTA. As noted above, a major focus of the land use element is to encourage transit oriented mixed uses and multiple family residential uses into the center of town where transit services can be optimized.

- Expand Transportation Capacity Offering Greater Mobility Options

The Transportation Element promotes all appropriate forms of transportation, auto, pedestrian, bicycles, transit, etc. Additional capacity for each form is planned and accommodated in the Elements policies. The Plan specifically calls for developing HOV lanes from Burien into Seattle.

Parks

Impacts of the Alternatives

Each of the alternatives can accommodate some expansion of park facilities. However, each alternative suggests a different strategy of expansion. The Well Established Alternative envisioned a minimal amount of expansion that keeps pace with the low population growth anticipated under this alternative. The Thriving Alternative anticipated that the higher growth rates associated with this alternative would allow more tax revenue to be available for park development.¹⁹ The Distinctive Alternative took another approach, accenting a limited amount of quality development and enhancements that use external sources of revenue for facility development, and regulatory measures to conserve open spaces.

Table 5.2-8 Analysis of Park Impacts analyses the amount of park development (acres) needed in the future to maintain alternative level of service standards. For the purpose of Table 5.2-8, Level of Service (LOS) is measured using the industry standard of “acres of park available per thousand population.” The amount of “acres of park available per thousand population” is based on the amount of developed acres of community or neighborhood Parks owned by either the City or the School District. The LOS measure excludes the more regional Seahurst Park and the large open space area of the Salmon Creek Ravine. Table 5.2-8 compares three alternative LOS standards: 1) the amount needed to maintain the current LOS; 2) reducing the current LOS from 2.7 acres per thousand population to 2.6 (the LOS standard used by the City of SeaTac; and 3) raising the LOS standard to a higher level of 3.25 (the standard used by the City of Des Moines).

¹⁹ Detailed fiscal analysis of the alternatives has shown that the such growth probably would not provide significant additional funds after accounting for the costs of other services and facilities needed to support that growth. While the Thriving Alternative does provide a better future fiscal balance than the other alternatives, this is only marginally better than the other alternatives. While the Thriving Alternative will generate more revenues, it will also generate more costs.

Table 5.2-8. Analysis of Park Impacts

COST FACTORS	Acres		
Current Community Parks	36.5		
Current Neighborhood Parks	38.8		
Total	75.3		
City Acres	35.5		
Cost Per Acre	\$278,784		
ALTERNATIVE STANDARDS	Well Established	Distinctive	Thriving
Population 2020	35,405	35,420	40,360
Current LOS			
Current Ratio of Acres Per Thousand Population	2.7	2.7	2.7
Needed Parks (Acres)	21.0	21.0	34.5
Total Costs	\$5,856,356	\$5,868,183	\$9,613,212
Developer Contributions	\$2,928,178	\$2,934,091	\$4,806,606
Net Costs	\$2,928,178	\$2,934,091	\$4,806,606
Proposed Standards Low			
Proposed Ratio of Acres Per Thousand Population	2.6	2.6	2.6
Needed Parks (Acres)	16.8	16.8	29.7
Total Costs	\$4,677,543	\$4,688,851	\$8,269,407
Developer Contributions	\$2,928,178	\$2,934,091	\$4,806,606
Net Costs	\$1,749,365	\$1,754,759	\$3,462,801
Proposed Standards High			
Proposed Ratio of Acres Per Thousand Population	3.25	3.25	3.25
Needed Parks (Acres)	39.8	39.8	55.9
Total Costs	\$11,093,215	\$11,107,349	\$15,583,045
Developer Contributions	\$ 2,928,178	\$ 2,934,091	\$ 4,806,606
Net Costs	\$ 8,165,037	\$ 8,173,257	\$10,776,439
Proposed Standards Preferred			
Proposed Ratio of Acres Per Thousand Population	3.0	3.0	3.0
Needed Parks (Acres)	30.9	31.0	45.8
Total Costs	\$8,625,649	\$8,638,696	\$12,770,107
Developer Contributions	\$2,928,178	\$2,934,091	\$ 4,806,606
Net Costs	\$5,697,471	\$5,704,604	\$ 7,963,501

The third LOS standard was developed from the consideration of park impacts and is recommended in the preferred alternative.

Table 5.2-8 not only estimates the amount of acres that must be acquired in the future based on a desired LOS standard, but also the potential costs. The costs include costs of acquisition (based on average assessed values of land)²⁰, and minimal development costs (reflecting the current level of park development in the City). The table also estimates the

²⁰ This figure can vary substantially depending on the character of the land.

anticipated revenue available from developer contributions, such as impact fees or provision of park facilities.

Increasing the LOS standard under each alternative rapidly increases the potential impacts (in terms of acreage required and associated costs) of each alternative. While the recommended LOS standard of 3 acres per thousand population requires additional revenues, it may realistically be fundable by external sources of revenue or supported by either local or regional bond issues over 20 years. For example, the recently proposed county wide bond issue would have raised approximately one-third of the revenue needed to support the Distinctive Alternative using this standard.

Mitigating Measures

The Preferred Alternative establishes a LOS standard of *3 acres of community or neighborhood parks per thousand population..* Since the population impact of this alternative is similar to the Distinctive Alternative, this policy would require approximately 8 to 9 million dollars to implement, with developer contributions providing almost \$3 million of these costs. In addition to active parks, the plan anticipates, with community support, additional passive park area which could be added to reduce the potential impact of further growth on open space and environmental resources. The Capital Improvement Program anticipates 3 to 4 million dollars being spent for this purpose. In addition implementation of the preferred alternative will require upgrading and improving the existing park system to better meet community needs. Seven- to \$9 million dollars of need has been identified in the capital improvement program for these needs. Considerable interest is also present in the community for a new community center, costs of which may be in the \$7 million to \$10 million range.

The policies of the Plan and the strategy described in the Capital Improvement Program (Chapter III) recommend a funding strategy that takes advantage of external resources, including regional bond issues, to provide the funding for these needs, along with other needs in the community. The Fiscal Analysis of the Alternatives section of this chapter assesses the financial ability of the city to carry out these improvements.

The Plan also identifies potential sites for park, recreation and open space acquisition, and policies to guide the development and management of the park system.

Drawing from the concepts of the Distinctive Alternative, the Preferred Alternative calls for an active system of community paths to connect the existing parks, recreation and open space sites, creating an effective network of community resources. This is proposed as a means to compensate for the relatively low LOS that the City currently has, and probably will be limited to affording in the future.

General Governmental Services

Impacts of the Alternatives

Each of the alternatives will increase the need for all types of general governmental services. In general, these requirements will be proportional to the growth planned, although some shifting of the character of the demand may occur with each alternative.

For example, the Well Established Alternative will continue the current balance between residentially oriented services. The Thriving Alternative will require a higher proportion of services for commercial uses. For example, proportionally more police services would be required for shop lifting and fraud than for burglary, although demand for all services would increase under all alternatives.

In terms of impacts, the increase in demand for services and facilities will be offset by increases in revenue. The amount of revenue will increase with the growth each alternative forecasts and as changes occur in the regional economy. Fiscal analysis of the alternatives, which will be separately published, indicates that revenues will generally balance increased costs provided that existing levels of service remain roughly the same as to day (as measured by dollars spent on the service). While there is some variation between the rate of growth of revenue and the costs between the alternatives, the variation is very minor, resulting in only a small difference in the net balance after 20 years. The Well Established and Distinctive Alternatives are very similar in the net result, although they vary in their assumptions regarding regional economic conditions. While the Thriving Alternative has somewhat better net results under any given set of assumptions, this difference is very minor and would easily be used up on just one major street project.

In conclusion, sufficient revenue will be generated by each alternative to support growth, provided very cautious prudent fiscal management is used in the long term. However, short term forecasts indicate some problem in sustaining current levels of service over the next few years.

Also, this conclusion assumes no significant improvement in the current level of service. This is a very significant assumption, since the city inherited very low levels of service from the County, as compared to most cities. The costs of improving levels of service cannot be offset by revenue generated by any of the alternatives.

A similar situation exists for capital costs. Use of on-going revenues from general operations can not be relied on to finance the capital facilities that are needed for growth. Almost all (if not all) such revenue would be required to support just the operational costs associated with growth. This is especially important for the types of street improvements that will be needed in single family neighborhoods, since revenue for these improvements generally comes from operations.²¹

Mitigating Measures

The Preferred Alternative is based on promoting a land use pattern that is the most economical to support. This is best noted by the impact of the Plan on capital facilities. Similar cost savings are possible in operations, although such savings are less easy to document. For example, a compact development pattern allows for more efficient police patrols, covering more people in the same route. Also, the less growth in areas

²¹ It should be noted that this discussion does not include revenues sources that are dedicated for capital purposes such as the Real Estate Excise Tax. These dedicated funds are also limited, but will be available for some of the improvements identified in this plan.

inadequately served by water systems reduces the special precautions fire services must make to serve such areas.

The final Plan will include a public services element that supports the needs associated with the Preferred Alternative.

Schools

Impacts of the Alternatives

The moderate amount of growth planned in all of the alternatives would not create a significant impact on the capacity of the local schools to accommodate the additional students. The city schools currently have additional capacity.

The District however is experiencing more growth pressure in other parts of its service area (Table 5.2-9). This growth would when combined with the growth allowed under the alternatives would create some demand for additional facilities. One of the biggest issues for the school district are the condition of the buildings. Most of the schools are more than 30 years old and were never designed to last more than 20 years, according to Geraldine Fain, Assistant Superintendent for the Highline School District.

Table 5.2-9 School Enrollment vs. Capacity

School	TOTAL Capacity	1994 Enrollment	Enrollment as Percent of Capacity
Cedarhurst	449	384	86%
Gregory Hgts	537	403	75%
Hazel Valley	449	423	94%
Seahurst	675	596	88%
Shorewood	525	475	90%
Sunnydale	525	515	98%
Elementary Subtotal	3,160	2,796	89%
 Sylvester MS	 937	 709	 76%
 Highline HS	 1,712	 1,292	 76%
SeaTac Occupational Skills Center	350	299	85%
HS Subtotal	2,062	1,591	77%

In the District's Six Year Plan, both Hazel Valley and Gregory Heights elementary schools are scheduled for remodeling by the year 1998; and Shorewood elementary school is scheduled for remodeling by 2000. Future student capacity in these schools will be increased to approximately 650. Based on enrollment projections, District Standards of Service, current inventory and capacity, and future planned classroom space, the District will have sufficient capacity to house students over the next six years. The table below outlines the District's present and projected capacities in Burien to the year 2000.

The six year plan also identifies a number of school remodeling that are anticipated to take place between 2000 and 2004. Cedarhurst and Sunnydale elementary schools will be remodeled to increase capacity to 650 students by the year 2002. Remodels will also

increase capacity to 1500 at Highline High School by the year 2002, and to 750 at Sylvester Middle School by the year 2004.

Table 5.2-10 Capacity Calculations

School	Total Capacity (1995)	Added Capacity (1998-1999)	Total Capacity (2000)
Cedarhurst	449		449
Gregory Hgts	537	113	650
Hazel Valley	449	263	712
Seahurst	675		675
Shorewood	525	150	675
Sunnydale	525		525
Elementary Subtotal	3,160		3,686
 Sylvester MS	 937		 937
 Highline HS	 1,712		 1,712
SeaTac Occupational Skills Center	350		350
HS Subtotal	2,062		2,062
TOTAL	6,159	526	6,685

The six year plan contains a plan for financing improvements for the years 1995 through 2000. The financing components include secured and unsecured funding. The plan is based on the passage of future bond issues, available funds from previous bond issues, securing of State funding, and collection of impact fees.

If the six year plan is successfully implemented there is a close match between the gross amount of housing growth that is allowed under the alternatives and the planned school capacity. Only the thriving alternative has more potential growth capacity than school capacity. It should be noted that this analysis does not include a comparison of potential changing demographics. The growth rate for children may not be the same as the growth rate for housing.

Table 5.2-11 Planned Capacity Vs. Housing Growth

School Capacity	Schools Current Capacity	School Planned Capacity 2000
Elementary	89.0%	75.9%
Middle School	76.0%	75.7%
High School	77.0%	77.2%
Total	82.7%	76.2%
Housing Capacity by Alternative	Current Housing as Percent of Planned Capacity	Difference Between Planned School Capacity & Housing Capacity
2020 Well-Established Community Alternative	79.0%	2.7%
2020 Distinctive Community Alternative	78.5%	2.3%
2020 Thriving Community Alternative	69.6%	-6.6%
2020 Preferred Alternative	76.9%	0.7%

All of the alternatives envision the shared use of school facilities for park and recreational resources.

Mitigating Measures

The preferred alternative allows a growth rate consistent with the planned capacity of the schools located in the city.

Utilities

The alternatives affect the six separate water purveyors for the City in similar ways.

Water Supply

Impacts of the Alternatives

Currently, there are no shortages in water supply for the districts serving the City, except for the Highline Water District. The alternatives affect current water supply needs only minimally. The Preferred Alternative also reduces the potential consumption within the area served by Highline Water District.

While the most significant issue facing all of the water districts is ensuring that adequate water supply sources are available to meet future demands, none of the alternatives change the regional water supply needs in a measurable way.

Mitigating Measures

All of the alternatives can accommodate appropriate conservation measures as set forth in each of the water district's Comprehensive Water Service Plans. The policies of the Preferred Alternative support these programs and the participation of each water district in the effort to develop an adequate regional water supply.

Water Distribution

Impacts of the Alternatives

As noted in the analysis, the adequacy of the water distribution systems to support growth varies substantially through out the City. The Thriving Alternative allows growth to continue in most areas without regard to these disparities. Implementation of this alternative would require substantial improvement in the water distribution systems. The other alternatives generally maintain the current level of service in residential neighborhoods. While in many cases this LOS standard should be improved, these alternatives do not compound existing problems by encouraging additional growth in the neighborhood. In addition, the Distinctive Alternative focuses more growth into the downtown area where water distribution systems are better developed and can be most efficiently enhanced.

The pipe size in the downtown area is a minimum of 8 inches in diameter. This should be sufficient to provide adequate capacity and fire flow, should the City plan for a much more intensive land use scenario than called for in the Highline Community Plan.

Mitigating Measures

The Preferred Alternative refines the Distinctive Alternative, better matching the allowed single family growth to existing densities in neighborhoods, and by supporting mixed uses in the downtown area. Mixed uses tend to balance commercial consumption patterns and fire flow requirements²² with residential consumption peaks, affording more overall efficiency in the distribution system.

Sewer²³

Impacts of the Alternatives

The alternatives affect the collection and treatment of sanitary sewer wastes in a variety of ways. There are two service providers in the City -- the Southwest Suburban Sewer District (SWSSD) and Rainier Vista/Val Vue Sewer District (RV/VVSD).

Treatment

Most of the anticipated growth in all of the alternatives is in the SWSSD's Miller Creek Subbasin. The treatment plant for this area has adequate capacity to support all of the planned growth for this basin. The increased growth planned in the Salmon Creek Basin under the Thriving Alternative could, when combined with growth in the rest of the service areas, begin to approach capacity in that plant.²⁴

Collection System

The SWSSD's comprehensive plan states that increasing density and intensity of multifamily and commercial development in Burien could have a negative impact on the capacity of a sewer system designed to serve neighborhoods with lower density uses. In these cases, larger sized pipes may need to replace the smaller diameter pipes with lower capacity that now serve many single family neighborhoods. Since the Thriving Alternative allows substantial growth in these neighborhoods, the problem of smaller diameter pipes with limited capacity will be the most significant in this alternative. The Distinctive Alternative includes the availability of adequate sewer service as a key criteria for designating the appropriate densities throughout the City.

Unsewered Areas

There are several areas not presently served by sewer collection facilities, including Three Tree Point, Seahurst, parts of Shorewood, and the northeastern and the southeastern parts of the City. Some of these areas are not within the service area

²² Both multiple family and commercial development require high fire flow. The extension new high capacity lines can be avoided by combining these uses in one area that can be served by an existing looped system.

²³ Information Sources: 1) *1993 Comprehensive Sewer Plan Update*, Southwest Suburban Sewer District; and 2) *Comprehensive Sanitary Sewer System Plan, August 1990*, Rainier Vista Sewer District.

²⁴ The Salmon Creek treatment plant facilities have a design capacity of approximately 3.6 million gallons per day (MGD). For the period 1975 to 1990, average annual wastewater flows ranged from 2.38 to 3.57 MGD. The Miller Creek treatment plant has a design capacity of 2.9 MGD, with a peak flow capacity of 13.3 MGD. From 1975 to 1990, average annual wastewater flows ranged from 1.93 to 3.74 MGD.

boundaries of the districts, while some are within the service area but are not currently sewered. Poor soils and a high potential for groundwater contamination creates severe limitations for septic tanks in these areas. Since many of the unsewered areas are in moderate and lower income areas, there is limited financial capacity for these extensions. The Thriving Alternative plans densities without regard to these limitations and could result in some compounding of existing problems. While the lower densities in the other alternatives will tend to avoid making existing conditions worse, they also may not help remove existing problems by reducing the financial incentives to extend the lines.

Mitigating Measures

The Preferred Alternatives approaches the unsewered areas using a phasing consideration. The Plan allows only lower densities in areas without adequate facilities. Annual plan amendments (or as part of the “Special Area Plan” for the northeast area) could consider revising the allowed densities if sewer service can be financed. Currently, the extension of sewer collection facilities is planned for unserved areas in a gradual process. The SWSSD has separated these areas into two groups. First, unserved areas outside the corporate boundaries of the District need to be annexed prior to the formation of a utility local improvement district (ULID) and sewer construction. Second, there are unserved areas within the District that are pending the formation of ULIDs to finance sewer construction. (The SWSSD will provide sewer facility extensions only when the ULID method has failed and a health risk has been determined.)

- Upgrade the Salmon Creek treatment plant with both a centrifuge and a rotating biological contractor train.
- Expansion of the compost facility.
- Upgrades for pump stations, including repairs, rehabilitation, and new generators.
- The District will finance collection system improvements in unsewered areas through ULIDs and a Construction Revolving Fund. In sewered areas, collection and interceptor system improvements will be made using grants, loans, ULIDs, developer financing, and general revenues.
- The 128th St. trunk sewer from 8th Avenue to 4th Avenue, under SR 509, is proposed to be constructed in 1996. If this trunk line is not constructed, the District would need to put in a pump station which would involve more maintenance costs than the proposed gravity-fed system improvement.

The Preferred Alternative envisions the development of a special area management plan to accommodate the development of a industrial park in the northeastern portion the city. A major constraint to be resolved in this plan is the potential adequacy of the interceptor line serving the area in supporting this more intensive type of development.

Storm Water Drainage

Impacts of the Alternatives

The impacts of each of the alternatives on storm water management are addressed earlier in the discussion of the impacts on the management of surface waters in the City.

Mitigating Measures

The Preferred Alternative includes a storm water master plan to manage the potential impacts associated with implementing the alternative. This master plan provides more detailed information on the existing conditions, services provided, and potential mitigation of identified these impacts. The development of this master plan included analysis of a wide variety of alternatives. The reasons that the preferred storm water management alternatives were selected are detailed in the master plan.

Electrical System

Impacts of the Alternatives

Increasing demand for electric services is a major regional consideration. However, none of the alternatives will increase regional population -- their impact will affect the distribution of people within the region. Consequently, the alternatives will not increase the overall consumption of electrical power.

While the Thriving Alternative will increase local demand more than the other alternatives, the difference should not have a material impact on the electrical system.

Mitigating Measures

In the Puget Power Service area, there may be a need for more higher voltage transmission lines, transformers, and distribution stations as the subarea develops and customers demand more power with higher reliability. In recognition of this, the *Draft Electrical Facilities Plan for King County*, prepared by Puget Sound Power and Light, January 1993, identifies a number of improvements in the Highline/Green River Subarea. None of these improvements are located within the City of Burien.

In the Seattle City Light (SCL) service area, Burien is served by the Duwamish substation which currently has sufficient capacity. However, the feeder lines serving the City are slightly under capacity, and SCL will be reconfiguring these systems over the next fifteen years.

Solid Waste

Impacts of the Alternatives

While solid waste is a significant regional issue, all of the alternatives impact this issue in a similar fashion. None of the alternatives will increase regional population -- there impact will affect only the distribution of people within the region and not the overall generation of solid waste.

While the Thriving Alternative will increase local demand more than the other alternatives, the difference should not have a material impact on the solid waste collection system.

Mitigating Measures

The City of Burien adopted the King County 1992 Comprehensive Solid Waste Management Plan. This plan includes a 65 percent waste stream reduction goal. In order to help meet this goal, the King County Solid Waste Division has established the Waste Reduction/Recycling Grant Program. The program funds projects to reduce and recycle the waste generated by commercial enterprises, individuals living in multi-family residential dwellings in King County's suburban cities, and yard waste generated by residential and commercial properties. The City of Burien is utilizing its grant funds to develop a waste reduction and recycling plan. After developing the plan, the City will use grant funds to implement projects outlined in the plan.

The City of Burien has established a special program to collect hazardous materials and other items that are recyclable but not collected through regular curbside service. The City collects such items through Special Recycling Collection Events, which are held in the spring and fall. Through these events, the City collects motor oil and filters, automotive tires, lead acid batteries, appliances, scrap metal, bulky yard debris, scrap wood, textiles, and reusable household goods. The City held its first Special Collection Event in September of 1995. It was very well received by the community.

Other recycling opportunities are also available to Burien residents. There are a number of recycling drop-off and buy-back centers in the area, as well as the privately owned and operated Burien Recycling Center. The Recycling Center accepts a wide variety of materials not collected through regular curbside programs, such as batteries, books, magazines, and an assortment of plastics and metals.

Natural Gas

Impacts of the Alternatives

All of the alternatives impact natural gas supply in a similar fashion. While the Thriving Alternative will increase demand more than the other alternatives, the difference should not have a material impact on the distribution system of these competitive utilities.

Mitigating Measures

The maximum capacity of the existing distribution system can be increased as required by one or more of the following:

- Increasing distribution and supply pressures in existing lines;
- Adding new distribution and supply mains for reinforcement;
- Increasing existing distribution system capacity by replacement with larger sized mains; and
- Adding district regulators from supply mains to provide additional intermediate pressure gas sources to meet the needs of new development.

The following major projects are anticipated to be constructed by the year 2000 to serve customers in Burien:

- Planned for 1996 - There is the possibility of a main extension from Burien's distribution system to the Arbor Heights system (route yet to be determined). Public improvement projects may also demand action on WNG's part.
- Tentative Future Projects - Replacement of existing 2 inch steel main in 1st Avenue South with 4 inch PE main in order to strengthen the existing distribution system.

Telecommunication Services

Impacts of the Alternatives

All of the alternatives impact Telecommunication Services in a similar fashion. While the Thriving Alternative will increase demand more than the other alternatives, the difference should not have a material impact on the distribution system of in this increasingly competitive industry. Successful implementation of the Preferred Alternative will require access by the city's business community to state of the art communications facilities.

Mitigating Measures

US West does not provide estimates of local capacity due to the proprietary nature of this information. WUTC regulations require US West to provide adequate telecommunications service on demand, and Section 480-120-086 of the Washington Administrative Code requires US West to maintain adequate personnel and equipment to handle any reasonable demand and traffic. Because US West provides service on demand, there are no envisioned limits to future capacity.

Other Communications

Impacts of the Alternatives

Other communications include cellular telephone service and cable television. All of the alternatives impact other communications in a similar fashion. While the Thriving Alternative will increase demand more than the other alternatives, the difference should not have a material impact on the distribution system of these competitive utilities. Successful implementation of the Preferred Alternative will require access by the city's business community to state of the art communications facilities.

Increased attention to design and visual amenities under the Preferred Alternative could discourage installation of communication towers and transmission facilities.

5.2.10 Fiscal Analysis of the Alternatives

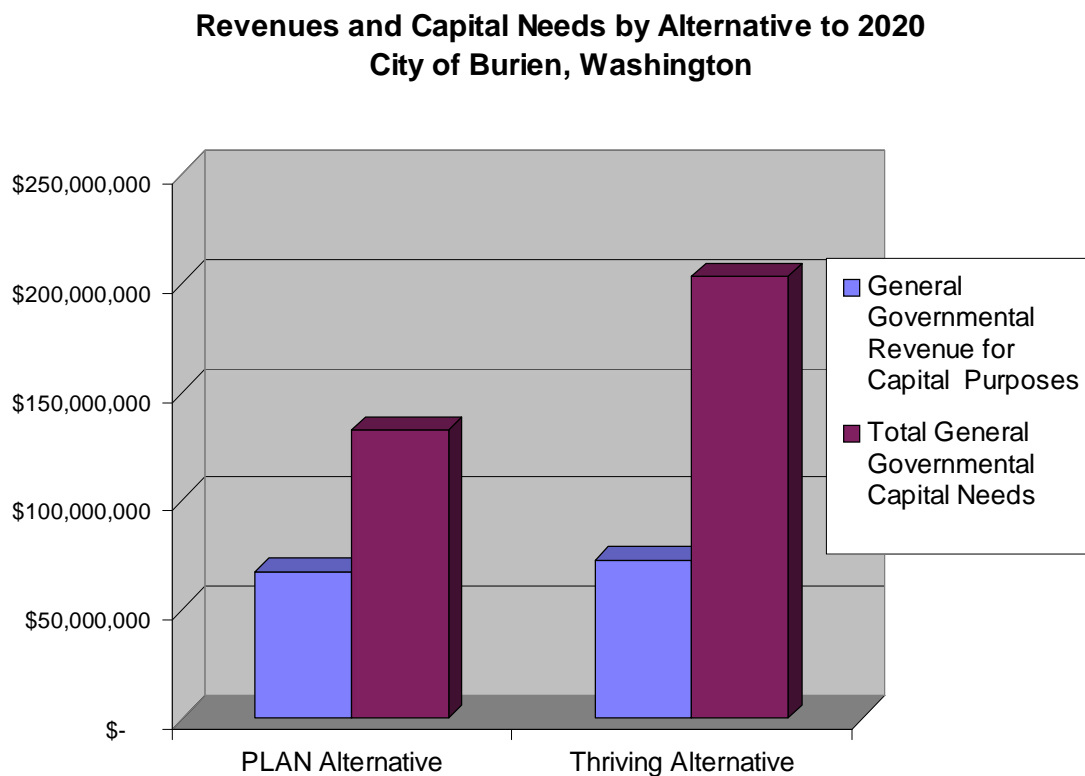
Summary

In addition to assessing potential impacts to the both the built and natural environment discussed above, an assessment must also be made regarding the fiscal impact associated with each land use alternative. For each alternative, there is a specific fiscal impact associated with providing capital facilities and other services commensurate with

forecasted growth. A fiscal analysis (*see Background Report No. 21: Alternative Analysis - Fiscal Viability of Land Use Planning Alternatives*) was prepared to evaluate the city's ability to support the implementation of the various plan alternatives. In short, the city will have difficulty supporting any of the plan alternatives, with on-going services and with existing revenue sources, even at the low levels of service currently being provided.²⁵

As seen in Figure 5.2-10, future capital needs are much greater than future general governmental revenues. This imbalance occurs under all plan alternatives, and is especially pronounced under the Thriving alternative. Therefore an effective strategy is needed to close the gap between need and resource or to mitigate impacts to future community health, safety and welfare.

Figure 5.2-10: Overview of Revenues & Capital Needs



Forecast

Fiscal forecasts of general fund revenues were generated using a fiscal forecast model that estimated each alternative's potential to generate revenue over the planning period.

²⁵ This analysis was prepared on the basis of the Planning Commission Hearing Draft as the "Plan Alternative." While subsequently the both the Planning Commission and the City Council had amended this alternative, these changes made little material difference in the original analysis as will be noted below. The net effect of these changes has been to slightly increase the conservativeness of the forecast.

Forecasts were based on a build-out²⁶ and a population/housing²⁷ forecast scenario. The following key assumptions were built into the model:

- The level of service currently being offered, although considered low, will not be increased;
- The third runway will not be built;
- Noise control measures will succeed in mitigating existing airport noise to the extent that it will not negatively effect property values;
- There will be no new tax or revenue changes; and
- Inflation will continue at current rates.

Fiscal forecasts from the model, compared to the capital facility improvement costs identified for each plan alternative, illustrates the fiscal viability of undertaking any one of the land use alternatives.

Revenue forecasts prepared by the Finance Department anticipate adverse financial conditions over the next five years. Consequently, the city will not only be unable to respond to additional needs, but will also have trouble meeting existing current levels of service. In the long run, however, the fiscal picture is slightly more encouraging as revenues are anticipated to outpace expenditures by a small margin. Figure 5.2-11 compares the revenues and expenditures over the planning period for each alternative. The growth of revenue closer to the year 2020 is attributable to the cumulative effect of new construction. It is important to also note the deficit during the first several years of the planning period. This poses a difficult decision for the city whether to expend reserves or to reduce the existing levels of service currently provided.

Potential Tax Base Growth

The amount of new construction (housing and commercial) at build-out and the amount of appreciation (the increase in the value of existing structures) produces an estimate of future tax base growth under each alternative. The size of the tax base determines the amount of revenues the city may collect in taxes that are used to pay for city programs and services.

Figure 5.2-12 illustrates the composition of new construction at build-out. Under the Plan alternative, 67% of new construction would be single family as compared to 81% under the Well Established, and 75% under the Thriving Alternative. The Thriving alternative provides for the largest increase in assessed valuation. The other alternatives are about equal in composition (mix of development) and increase in assessed valuation.

²⁶ The term “build-out” refers to the maximum development capacity of the city as allowed by its land use regulations. At build-out there is not capacity to accommodate new growth.

²⁷ Under the Growth Management Act, King County is responsible for allocating housing/ employment growth projections to its cities. The high forecast for Burien’s share of expected housing growth is 1,995 units.

Figure 5.2-11: Long Term Fiscal Trends

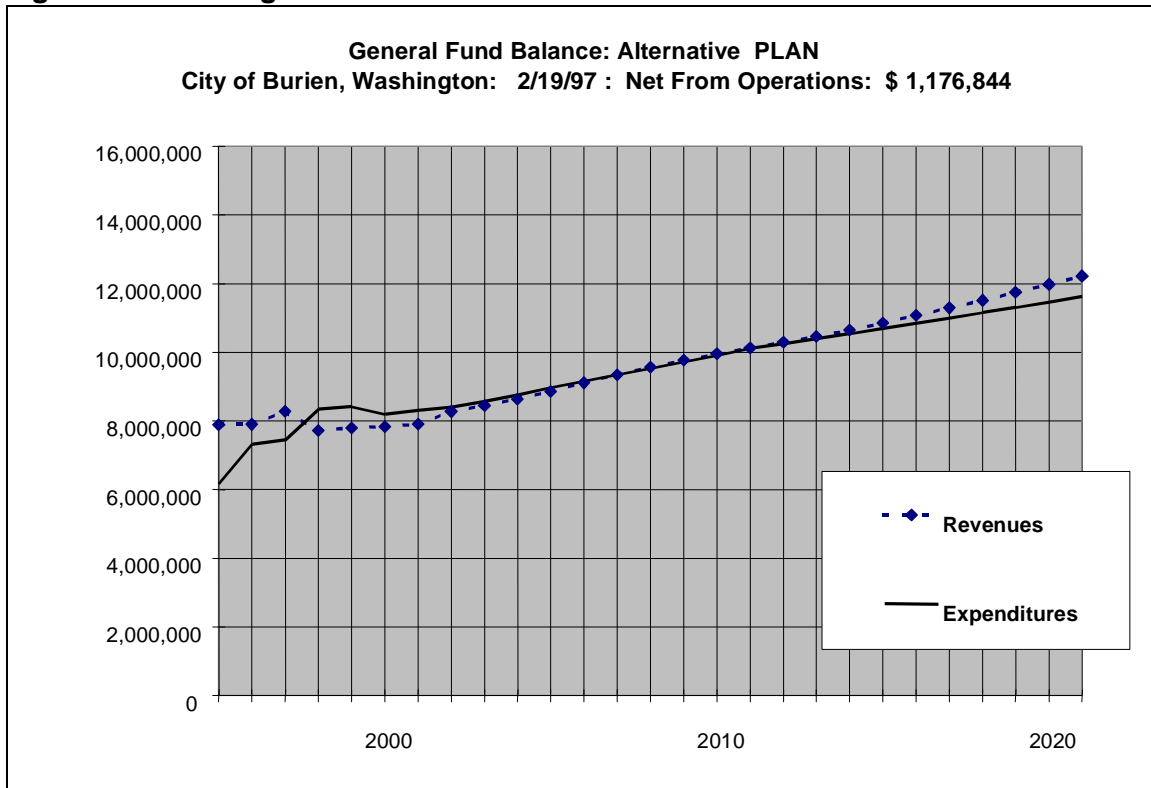
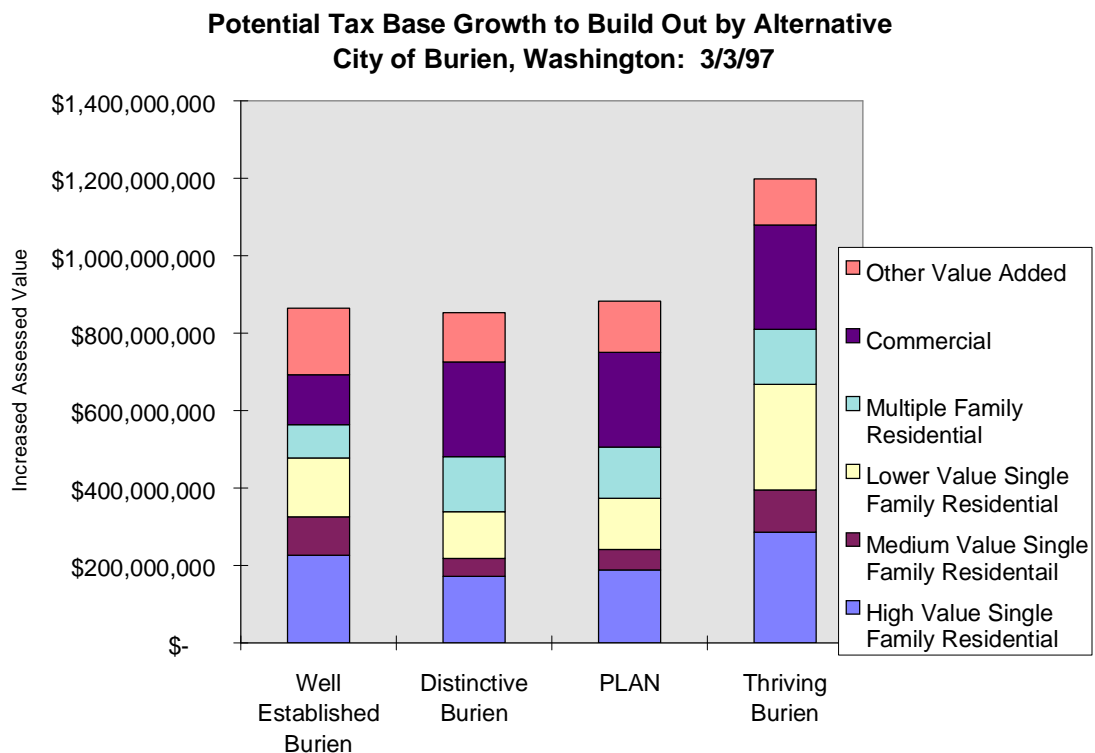


Figure 5.2-12: Tax Base Growth By Type of Development



Implications on Governmental Operations

Taken together, the revenue forecasts and the potential for tax base growth provide a future view of what the governmental operations budget will look like under each of the plan alternatives. Table 5.2-12 accomplishes this by providing a comparison of forecasted annual revenue and expenses for year 2020. The General Fund balance (total revenues minus total expenses) under each alternative is the amount of discretionary money that city has to spend on such items as capital improvements. None of the alternatives generate enough money to be considered a significant source of future capital improvement funds.

Table 5.2-12.

	Existing (1996)	Alternative 1 Well Established (2020)	Alternative 2 Distinctive (2020)	Alternative 3 Thriving (2020)	Alternative 4 Plan
Revenues					
Property Tax	\$2,555,242	\$4,760,050	\$4,809,187	\$5,025,961	\$4,833,668
Sales Tax	\$3,153,062	\$4,732,642	\$4,980,435	\$5,491,815	\$5,051,864
REET ²⁸	\$376,135	\$657,163	\$663,452	\$691,796	\$666,647
Other	\$2,567,411	\$2,320,123	\$2,334,812	\$2,435,856	2,333,670
<i>Total Revenue from all Sources</i>	<i>\$8,275,715</i>	<i>\$11,812,815</i>	<i>\$12,124,434</i>	<i>\$12,953,632</i>	<i>\$12,219,202²⁹</i>
Expenses					
General	\$1,102,299	\$1,707,625	\$1,720,363	\$1,802,887	\$1,725,699
Government					
Legal (court, jail, etc)	\$611,707	1,074,161	\$1,089,116	\$1,142,321	\$1,092,993
Police	3,503,350	5,165,532	\$5,237,449	\$5,493,308	\$5,256,094
Other	\$2,230,676	\$3,599,819	\$3,553,222	\$3,594,444	\$3,554,857
<i>Total Expenses</i>	<i>\$7,448,032</i>	<i>\$11,547,137</i>	<i>\$11,600,150</i>	<i>\$12,032,960</i>	<i>\$11,629,643³⁰</i>
General Fund Balance	827,683	\$265,677	\$524,284	\$920,672	\$589,558 ³¹

General Fund Revenues

General fund revenue growth is from 43 percent under the Well Established alternative to 56 percent under the Thriving alternative. Upon closer examination, the difference between alternatives is more pronounced with respect to sales tax revenues. These receipts are forecasted to decline because each alternative anticipates greater growth of sales volumes from economic development. Growth in sales tax varies from 50% under the Well Established alternative to 74% under the Thriving alternative. Property tax increases are similar under all the alternatives.

Under all alternatives, intergovernmental revenues decline due to the loss of sales tax equalization funds. Sales tax equalization is provided by the State to supplement sales tax funds in cities that have relatively low volumes of sales tax. The table does not reflect the

²⁸ REET revenue is not included in Total Revenue figure.

²⁹ The adopted City Council Plan changes the forecasted General Fund Revenue to \$12,292,270.

³⁰ The adopted City Council Plan changes the forecasted General Fund Expenses to \$11,639,038.

³¹ The adopted City Council Plan changes the forecasted General Fund Balance to \$653,231.

use of a utility tax as a possible revenue source. This source of potential revenue could provide an additional \$25 to \$28 million in revenue over a 25 year period.

General Fund Expenses

In all of the alternatives, the largest expense is for police, court and jail costs. The largest relative increase occurs in providing street and park maintenance to a minimum acceptable level. Moreover, this analysis assumes no increase in the level of human services presently being offered. The Street Fund, separate from the General Fund is anticipated to need to be subsidized annually by the General Fund to meet maintenance needs.

External and Internal Sources of Funds

Table 5.2-13 provides a comparison of the forecasted capital revenue generated under each plan alternative using the population forecast method.

Table 5.2-13.

	Alternative 1	Alternative 2	Alternative 3	Alternative PLAN
Capital Revenue - Forecasted Population Growth	Well Established	Distinctive	Thriving	"Preferred"
Internal Sources of Funds:				
Total From Operations	-\$939,932	\$685,135	\$4,453,445	\$1,176,844
REET	\$13,387,358	\$13,463,266	\$13,778,668	\$13,500,281
External Sources of Funds:				
Arterial Street Funds	\$5,681,908	\$5,681,908	\$5,807,672	\$5,681,908
CDBG	\$5,018,991	\$5,018,991	\$5,133,960	\$5,018,991
Street Grants	\$11,887,084	\$11,887,084	\$12,159,380	\$11,887,084
County Open Space Bond proceeds	\$6,530,576	\$6,530,576	\$6,663,206	\$6,530,576
Voted Bond Issues	\$23,607,030	\$23,815,225	\$24,692,615	\$23,916,074
TOTAL	\$65,173,015	\$67,082,185	\$72,688,945	\$67,711,757³²

The 'Total from Operations' line under internal sources of funds depicts the amount of capital derived from current operations that is forecasted to accumulate over the planning period. None of the alternatives provides any significant amount of additional resources for capital purposes, whether to maintain existing capital improvements or to invest in new capital improvements. Therefore, other sources of revenue, namely those "internal" and "external," must be used to offset this deficiency.

Internal Sources of Capital Funds

Internal sources of capital funds include expending money out of current operations and the Real Estate Excise Tax (REET). As noted, contributions from operations is negligible over the planning period under all of the alternatives. On the other hand, REET (a tax applied to real estate transactions and restricted to capital purposes) money is levied on new growth and therefore is the most sensitive to the amount of growth allowed over the

³² The adopted City Council Plan changes the forecasted Capital Revenue to \$68,787,825.

planning period. The REET can cumulate approximately 13.5 to 13.7 over the forecast period.

The Arterial Gas Tax is another on-going source of revenue for capital projects. It is allocated based on population, therefore this source of revenue is expected to grow over time and, like the REET, is sensitive to the amount of growth. The Plan alternative could yield \$5.8 million and the Thriving Alternative as much as \$6.2 million.

External Sources of Capital Funds

External sources of capital funds are more difficult to predict, but represent a significant contribution to the source of capital funds. External sources include, Community Development Block Grant (CDBG), state and federal grants, and King County Open Space Bond proceeds. The CDBG money is received on an annual basis from the state whose responsibility it is to distribute these federal dollars. This money must be targeted to lower income areas of the city. King County Open Space Bond proceeds have made a significant contribution to the city's parks and open space. It is expected that King County will continue to put this bond issue before the voters with some regularity (every 6 years). This source may account for approximately \$8 million dollars over the planning period.

Bond Issues

Since incorporation the city has not issued any voter approved bonds. Bonds represent a significant and yet untapped source of capital funding. A conservative bond issue (with issues supported by tax rates in the neighborhood of 35 cents per thousand assessed value) program could generate between 25 to 29 million for capital projects.

Capital Needs of General Government

The type and cost of capital facilities needed to support future growth under both the Preferred alternative and the Thriving alternative is presented in Table 5.2-14 below.

Some of the cost estimates were derived from actual projects either within the city or from neighboring jurisdictions. Other cost estimates were calculated by using appropriate engineering factors. The 65 percent cost difference between the Preferred alternative and the Thriving Alternative points out the differences between the two alternative's land use scheme to allow for future growth.

Under the Plan alternative there is a lower transportation cost because of the plan's policies to support lower levels of street improvements and resurfacing requirements for low density areas. Conversely, the Thriving alternative costs are much higher due to the need to develop services to urban standards throughout the city in order to adequately serve the population growth that could occur under this alternative. The costs include the cost of reconstructing rather than resurfacing some streets; increasing the roadway capacity of the city's major roadways; and, an increase in level of required improvements for residential streets.

In either the Plan or Thriving alternative, the capital cost associated with general government to accommodate the population allocated to the city by the Countywide Planning Policies remains nearly the same. The 5 million cost difference for parks is due to the need to increase the amount of parks space to accommodate the higher population growth and still maintain the desired level of service (3acres/1,000 pop.) under the Thriving Alternative.

Table 5.2-14. Capital Projects by Category

	Plan Alternative "Preferred"	Thriving Alternative	Notes
Transportation			
Baseline Transportation Improvements	\$31,700,000	\$36,800,000	
To Achieve Appropriate Standards	\$59,547,899	\$119,261,487	
Develop Path Network	\$9,400,000	\$9,400,000	
Subtotal	\$100,647,899	\$165,461,487	
Parks			
Land Acquisitions (Active Parks)	\$8,166,014	\$13,182,785	Based on a LOS of 3.0 ac/1,000 pop.
Land Acquisitions (Passive Parks)	\$3,556,900	\$2,656,900	
New Community Center Improvement	\$8,008,947 \$4,366,704	\$9,100,000 \$4,520,790	
Plan Amenities	\$2,300,000	\$2,300,000	
Current Maintenance Needs	\$2,386,640	\$2,386,640	
Subtotal	\$28,785,205	\$34,147,115	
General Government			
Office Space	\$223,042	\$233,047	
Police Office Space	\$326,651	\$341,303	Additional Space: does not include replacing current facility
New City Hall (Long Range)	\$2,489,329	\$2,828,448	
Subtotal	\$3,039,022	\$3,402,798	
Total Capital Costs	\$132,472,126	\$203,011,400	

Human Services

The city receives \$250,000 per year from Community Development Block Grant (CBDG) funds. These funds are targeted to low-income populations to fund projects and costs associated with low income housing, including repair programs. Other capital improvements may include neighborhood enhancements (sidewalks, lighting) in low

income areas. The amount of money spent on human services by the city will not likely vary under either the Plan or the Thriving alternative.

Impacts of the Alternatives

In summary the four plan alternatives have the following impacts:

- For general government operations the Thriving alternative provides the best balance of revenues to expenditures. However, this advantage is only marginally better (\$180,000 per year) than the Plan alternative. In contrast, the Thriving Alternative shows the most significant deficit for capital costs and revenues among the alternatives.
- Positive fiscal impacts of growth under any of the land use alternatives does not occur until the end (2015-2020) of the planning period.
- To increase level of service under any of the plan alternatives can only be achieved through a tax increase.
- Substantial additional revenues may be tapped through the use of bond issues or a utility tax.
- Internal financing of capital needs at existing tax rates relies on the capacity of the Real Estate Excise Tax (REET) and any transfers from the operating fund to the street fund.
- Other types of capital financing, such as bond issues and grants, could reasonably be expected to provide \$33-\$37 million over the planning period.
- Capital needs identified under the Thriving alternative exceed 200 million dollars.
- Capital needs identified under the Plan alternative exceed 130 million dollars.

Mitigation Measures

The tables and graphs presented above illustrate the fiscal impact or the cost of growth. This cost stems from the need to provide capital facilities to serve the projected growth in population. The cost of growth is determinant on which land use alternative is chosen since each land use alternative provides for varying levels and types of growth. The Thriving alternative allows for the most development in single family neighborhoods and consequently requires the highest level of future revenues to pay for needed capital facilities spread out through the city.

The Preferred Alternative matches zoned densities with actual densities in single family neighborhoods in an effort to protect neighborhood character, environmentally sensitive areas, and to reduce the potential for overburdening existing capital facilities, such as streets, water, sewer, and stormwater. The Plan Alternative directs new multiple family housing and mixed use developments in limited areas and in the downtown area where additional growth and development can be most efficiently supported. The cost difference to provide capital facilities under these two land use alternatives is substantial. As shown in Table II the cost difference of over the planning period amounts to over \$70 million. Also, this alternative allows the limited capacity for capital investment to be focused in a manner that allows greater cost/benefits.

Even under the Preferred alternative (or any alternative), the city's ability to pay for new growth is tenuous due to the city's taxing structure, a reduction in sales tax equalization money, and the continuing reduction in state and federal funds for capital projects. The city may well have to increase taxes to pay for future growth or reduce the levels of service currently being provided. However, there are several sources of untapped resources that may be explored to offset the difference between future revenues and expenses; these include the use of bond issues and a utility tax.

Balances and Deficits

The recommended comprehensive plan presents a balanced 25-year program of capital revenues and expenditures to support the comprehensive plan. This "balance sheet" of the plan is presented in Table 5.2-15. This balance sheet is the result of the financial policies of the capital facility element of the plan. However, even under the reduced impacts associated with the recommended plan in contrast to the Thriving Alternative, the revenues available under the plan are insufficient to meet all of the needs as identified in the analysis of impacts. Table 5.2-16 compares the planned expenditures with the identified needs.

The two tables together present a three-prong approach to meeting the long-term needs of the city. In the analysis described above, each potentially needed project was evaluated according to the CFP policies and strategy to determine whether the project addressed a basic need, provided an important community enhancement, or reflected a lower priority or an upgrade to a facility that served a definable local area. Table 5.2-15 identifies the projects that address a basic need and the projects that represent community enhancements. Ongoing revenues were then matched with the priority projects that address basic needs. The potential bond issue funding, as estimated above, was then assigned to fund community enhancements. These two strategies fund the essential elements of the plan.

Table 5.2-16 compares the planned funding of projects with the total identified need in the plan. Although as noted over \$88 million dollars of projects are not matched with a funding source, these projects are either lower priority needs or projects that may be funded more appropriately by LIDs, special grants or developer contributions as local support or need would warrant through the life of the plan. The largest share of this need, \$53 million dollars, is to upgrade streets to appropriate standards for either local streets in urban areas or for arterials. While such improvements are appropriate for a desirable level of service for all modes of transportation (including bicycles and pedestrian as well as providing appropriate quality of streetscapes in residential and commercial areas), the planned basic improvements and enhancements will adequately maintain the functionality of these streets and remove significant safety hazards and congestion points. The remaining "unfunded" projects are projects that will enhance the quality of the park system, provide a larger community center, and add more paths. While these projects would improve the current and planned level of service for these facilities, they are not necessary for meeting basic needs or ensuring the functionality of these services.

Table 5.2-15. Long Range Balance Sheet, Capital Facilities Element

Planning Commission Recommended Plan City of Burien Washington September 15, 1997	
General Governmental Revenue	
From Table I in Chapter III	
Total Revenue From Operations	\$ 1,176,844
Real Estate Excise Tax	\$ 13,500,281
Arterial Street Funds	\$ 5,681,908
Community Development Block Grants	\$ 5,018,991
Street Grants	\$ 11,887,084
County Open Space	\$ 6,530,576
Voted Bond Issues	\$ 23,916,074
Total	\$ 67,711,758
General Governmental Expenditures	
Tabulated From Table IX	
Basic Program Funded by On-Going Revenues	
Transportation Improvement Projects (Basic Needs)	\$ 22,688,600
Basic Path System	\$ 2,025,000
Park Basic Needs	\$ 5,351,296
Small Downtown Improvements	\$ 1,625,000
General Government Basic Needs	\$ 549,693
Basic Program	\$ 32,239,588
Enhancement Program Funded Primarily by Bond Issues	
Transportation Improvement Projects (Enhancements)	\$ 15,520,000
Path Enhancements	\$ 600,000
Passive Park Enhancements	\$ 3,556,900
Active Park Enhancements	\$ 5,961,448
Gateways (E)	\$ 800,000
General Government Enhancements	
Community Center	\$ 6,000,000
City Hall	\$ 2,489,329
Enhancements	\$ 34,927,677
Total CFP	\$ 67,167,265

Table 5.2-16. Needs and Program Compared, Capital Facilities Element

NEEDS AND PROGRAM COMPARED				
Capital Facilities Element				
Planning Commission Recommended Plan				
September 15, 1997				
City of Burien Washington				
Needs From Table 5.2-15				
	Needs	Funded by Basic Program	Funded by Enhancements	Will Need To Be Other Means
Transportation				
Baseline Needs	\$31,700,000			
To Achieve Standards	59,547,899			
Total	91,247,899	\$22,688,600	\$15,520,000	\$53,039,299
Paths	9,400,000	2,025,000	600,000	6,775,000
Active Parks				
Acquisitions	8,166,014			
Improvements	4,366,704			
Rehabilitation	2,386,640			
Total	14,919,358	5,351,296	5,961,448	3,606,615
Passive parks	3,556,900		3,556,900	
Community Center	8,008,947		6,000,000	2,008,947
Plan Amenities	2,300,000	1,625,000	800,000	1,500,000
Office Space	549,693	549,693		
New City Hall (Long Range)	2,489,329		2,489,329	
Total	\$132,472,126	\$32,239,588	\$34,927,677	\$66,929,861
Annual Taxes Required to Fund Balance				\$4,862,382
Effective Tax Rate Per Thousand Assessed Value				\$1.78

The tax rate required to fund all of these additional needs by a bond issue in the near future would be \$1.78. Spreading these bond issues out over the 25 year period of this plan could reduce the average tax rate to fund the debt service to between 90 cents and one dollar per thousand assessed value. This would be in addition to the planned debt service to fund the enhancements of between 30 cents and 35 cents per thousand assessed value.

5.3 1998 BURIEN PLAN ENVIRONMENTAL REVIEW

5.3.1 The Airport Issue (Amended, Ord. 223, 1998)

Any discussion of the future of Burien needs to consider the implications of the location of SeaTac International Airport near the city. While this facility offers some economic opportunities to the nearby communities, its negative impacts have to date generally outweighed any benefits associated with those opportunities to Burien. This facility currently subjects the community to numerous adverse impacts associated with heavy air traffic movements extending north and south from the current runways. Small aircraft flying east-west routes also subject the community to aircraft noise. While noise is the most significant adverse aspect of this activity, other adverse impacts include vibration, fumes, air pollution, and visual distractions. Cumulatively this activity creates a "heavy

air traffic shadow” that reduces the livability of affected neighborhoods. While these adverse impacts are most severe in the northeastern portion of the city, they penetrate all of the city’s neighborhoods to some degree. While improvements in aircraft engines may reduce noise associated with air traffic, the perception that the affected neighborhoods are not desirable places to live will linger throughout most of the planning period, well after the new engines are installed.

Currently the Port of Seattle, the airport operator, is planning an expansion program that will increase the intensity of airport activity and bring it closer to the city by almost half a mile. This expansion program is embodied in the Airport Master Plan which provide for a wide range of facility and terminal expansions, including the construction of a new runway (the airport’s third runway). In the view of the Port, these improvements will be needed to accommodate a forecasted 17.9 million enplaned passengers by the year 2010. The “third” runway will be located directly over what is now Twelfth Avenue South in the City of SeaTac. The amount of fill required for this construction will create a bulkhead 150 feet in height depriving local residents of views, sunlight, and street access. This runway will place air traffic directly over the northeastern portion of the City of Burien, exacerbating and extending existing impacts over broader areas of the city.

While the Puget Sound Regional Council (PSRC) has endorsed this Airport Master Plan as part of the Regional Transportation Plan (PSRC Resolution A-96-02), the City of Burien, along with other affected communities in the impact area, have contested the approval of the this addition to the regional transportation plan on numerous grounds.

Appropriate appeals have been filed in state and federal court and before the Central Puget Sound Growth Management Hearings Board.

The Port must overcome numerous legal, financial, permitting and practical problems before it can construct the new Airport facilities it is planning. At this time it is uncertain whether any or all of the planned Airport facilities, especially the proposed third runway, can, or will, be constructed. The City cannot assume the third runway will be built. This situation creates significant uncertainty in the City’s planning process.

There are two potential outcomes to this uncertain situation and each has its own planning implications:

1. The planned third runway is not constructed.

While this will significantly reduce the adverse impacts of the operation of SeaTac International Airport on the City of Burien, the activity associated with the operation of the existing airport has had and will continue to exert adverse impacts on the community. This Comprehensive Plan (Preferred Alternative) reflects these considerations.

Study of the single family neighborhoods and housing quality in the area immediately impacted by existing activity indicates that much of the area is in a precarious balance

between areas that are surviving vs. those areas in decline with blighted conditions. Two factors seem to interact, distance from the flight track and densities. The closer a neighborhood is to the flight track the more likely it is to have blighted conditions. However this seems to be mitigated in neighborhoods with lower single family housing densities, suggesting that lower densities provide amenities that assist in buffering noise, visual and vibration impacts of the heavy air traffic shadow.

While these factors are most intense and observable near the airport, similar relationships extend through the rest of the community. There is considerable blighting potential wherever residential amenities (such as large lots, natural features, open space, ample trees, views, long term neighborhood attachment, quality of public facilities or quality design and construction) are lacking.

The policies of this Plan (Preferred Alternative) provide a strategy to manage these interrelationships:

- Maintaining low density neighborhoods near the flight tracks;
- Exploring the conversion of residential areas directly impacted by the flight tracks to other uses;
- Reinforcing and protecting existing neighborhood quality and stability in a way that residential values can be sustained over the long term;
- New residential development, especially when it is higher than current densities, is focused into the city center where planned downtown amenities can be used to enhance and support quality living environments; and
- Reducing the total number of people subjected to conflict between air traffic activity and residential uses, while still accommodating the city's share of regional growth as reflected in the county's population allocations (Amended, Ord. 223, 1998).

2. The planned third runway constructed.

This outcome would require more dramatic policy changes than those suggested above and may require amendments to this Plan. Moving the heavy air traffic shadow half a mile further into the city, (along with its psychological effects on existing and prospective residents and schools) would reduce the livability of the city's northeastern and southeastern neighborhoods. It is very likely to push the area "over the edge" in the ability of the neighborhood to sustain itself as a viable residential area. (It should be noted while a similar area in SeaTac, which is directly under the current flight tracks, has been "bought out" by the Port, the Port has no such plans for similar mitigation in this area even though it will be directly under the flight track for the new runway).

The entire neighborhood may need to be converted to other uses. Not only would this remove as many as 1500 households, the regional mental health center, a historic grade school and a World War I memorial, it would also require massive public and private investment to stimulate the necessary reinvestment.

Construction impacts associated with the project will substantially impact most of the current uses in the east central neighborhood for the duration of the construction project. This includes the city's primary sport park, a historic grade school, a World War I memorial and high school along with numerous multiple family complexes. Significant but more indirect impacts in other neighborhoods will require more active measures to offset potential blighting influences, including increased police protection, aggressive park and recreation programs, substantial downtown improvements, neighborhood rehabilitation programs, road improvements, surface water controls, other utility improvements and retrofitting buildings, etc.

This plan does not include these measures. If the third runway is constructed, mitigation will be required. Since GMA Goal 12 requires that the necessary mitigating measures be funded, and given that the City would not have these financial resources, outside assistance will be required to achieve concurrency.

Mitigation of significant adverse environmental impacts of proposals is authorized by state law, including the State Environmental Policy Act, Chpt. 43.21C.RCW, and by city ordinances. Such mitigation is also authorized by numerous state, regional, county and city policies. Under certain circumstances, permit applications may be conditioned or denied if significant adverse environmental impacts are not mitigated. If the third runway is constructed, all permitting agencies should require the mitigation of significant adverse environmental impacts to the maximum extent allowed by law.

5.4 2003 BURIEN PLAN ENVIRONMENTAL REVIEW

5.4.1 Introduction

A Final EIS Addendum was prepared in November 2003 to provide an environmental review and analysis of the proposed update of the 1997 Burien Comprehensive Plan (Burien Plan) pursuant to SEPA requirements. The City of Burien (the City) proposed to amend the Burien Plan by adopting updates to the community's existing conditions, policies, and maps that implement the Burien vision [RCW 36.70A.130(4)].

RCW 43.21C.034 and WAC 197-11-600 allow use of existing environmental documents to analyze the environmental impacts of a new proposal, which in this case is the Burien Plan update. Existing environmental documents may be used in a number of different ways. Issuance of an "addendum" is appropriate for this proposal. An addendum "...adds analyses or information about a proposal but does not substantially change the analysis of significant impacts and alternatives in the existing environmental document" [WAC 197-11-600(4)(c)]. As discussed below, the proposal would not substantially change the environmental analysis contained in these documents.

The City Council's final decision on the Burien Plan update must "...be within the range of alternatives discussed in the relevant environmental documents" [WAC 197-11-655(3)(b)]. Although the update would result in the addition of a new economic

development element, minimal changes to storm water strategies, development potential, and traffic patterns. The impacts of the modifications would remain within the range of impacts considered by the 1997 Burien Plan EIS.

The proposed action would include the addition of an economic development element to the Burien Plan as an optional element, which is not required under the GMA [WAC 197-11-444]. Economic development measures and methods of financing, economic competition, profits, personal income and wages, and social policy do not require review under SEPA [WAC 197-11-448]. Therefore, the probable significant adverse environmental impacts of the proposed Burien Plan update are covered by the 1997 EIS and this analysis and a new threshold determination is not required [WAC 197-11-600(3)(ii)].

As a part of the 7-year update, the Planning Commission held several study sessions and three public hearings to give residents the opportunity to comment and inquire about the process. The following list provides a summary of the Planning Commission's activities associated with the proposed action.

- | | |
|---------------------|--|
| April 22, 2003: | Planning Commission refresher course of the Growth Management Act and the update process. |
| May 13, 2000: | Presentation to the Planning Commission of the Comprehensive Plan Gap Analysis. |
| May 27, 2003: | Planning Commission introduction to the Transportation Element. |
| July 8, 2003: | Planning Commission introduction to and discussion of the Comprehensive Plan Update Package No. 1 (Housing and Parks Elements). Planning Commission also introduced to and discussed Comprehensive Plan and Zoning Map amendments. |
| July 22, 2003: | Planning Commission holds Public Hearing on the proposed Transportation Element update. Study session continues on the Housing and Parks Elements). |
| August 12, 2003: | Planning Commission holds Public Hearing on the proposed Comprehensive Plan Land Use and Zoning Maps changes. |
| August 26, 2003: | Planning Commission discussion and recommendation on the Transportation Element, Comprehensive Plan Land Use and Zoning Maps changes, and introduction on docket item No. 2000-3.b (expand public facility designation). |
| September 9, 2003: | Planning Commission study session on Comprehensive Plan Update Package No. 2 (Land Use, Utilities, Storm Water, and Capital Facilities Elements.) Study session ensues on the expansion of public facility land use designation. |
| September 23, 2003: | Planning Commission holds a Public Hearing on the proposed amendments to the Burien Plan associated with the 7-year update and zoning code changes. No comments were received. |

October 22, 2003: Planning Commission makes final recommendations to the City Council.

The Washington State Department of Community, Trade and Economic Development (CTED) and the Puget Sound Action Team (PSAT) have also reviewed and submitted comments on the proposed action (November 3, 2003). These comments are incorporated into the Burien Plan update.

5.4.2 Proposed Action

Overview

The proposed action consists of amending the 1997 Burien Plan (or the Burien Plan update) to fulfill the GMA 7-year update and incorporate approved docket items from 1998 - 2002. Modifications to the Land Use and Zoning maps are also proposed to ensure internal consistency and appropriate implementation of proposed policy amendments. The proposed 2003 Burien Plan would include both administrative and substantive modifications to the following components:

Comprehensive Plan

- General policy updates to reflect changes in community demographics and conditions (Chapter 2);
- Replacement of Transportation Element with a new version (Section 2.5);
- Addition of an optional Economic Development Element (Section 2.11);
- Update of the Capital Improvement Program (CIP) (Chapter 3); and
- Update of Existing Conditions (Chapter 4).

Comprehensive Plan Land Use Map / Zoning

- Map Amendments

In general, many of the proposed changes to Burien Plan policies would serve to mitigate the impacts of future residential and commercial development within the community. Examples of such policy modifications include: encouragement of low-impact development and regional storm water detention facilities to enhance water quality; affirmation of the City's commitment to the use of Best Available Science when considering critical areas; and preservation of natural habitat critical for the conservation of salmonid species listed under the Endangered Species Act (ESA).

Added focus is also proposed to several land use, housing, and community character policies. Proposed policy changes would provide additional encouragement for smart growth planning practices. Modifications to these elements would establish Downtown Burien as a regional urban center, development of a demonstration housing program to improve affordable housing choices for residents, and provide further guidance for the redevelopment of the Burien Town Square. Because the 1997 Burien Plan already

accommodates appropriate density and land use patterns, no changes to density / intensity within the community is currently proposed.

The addition of an Economic Development Element to the Burien Plan is another component of the proposed action. The mission of this optional element is to ensure Burien is the best place to work, live, learn, shop and visit. Proposed policies encourage a strategy for improving the interaction between business and government, improving private market conditions, and that encourage a business climate needed to attract and retain businesses in a highly competitive environment.

The proposed action would also replace the existing Transportation Element to consolidate, streamline, and improve readability of the transportation policies while maintaining the current policy intent. This element was updated to include a revised long-range forecast of future traffic volumes over a 20-year horizon that is internally consistent with the land use element, as well as the Puget Sound Regional Council (PSRC) Destination 2030 transportation plan. The analysis of existing transportation system conditions, in conjunction with analysis of the 2020 planning horizon, provides the City with a response to its most immediate short-term transportation needs, as well as defining needed longer-range transportation improvements.

The major modifications proposed to the existing policy intent of the Transportation Element include 2 major policy change recommendations and policy additions.

1. Policy TR 1.1.2 Level of Service Standards (LOS)
 - Changes LOS on 1st Avenue South from LOS D to LOS E
 - Changes LOS standard to D within the urban center boundary, as shown in Figure 2LU-1.11, and for the intersection of SW 128th Street and Ambaum Boulevard SW
 - Maintains LOS on other roadways as LOS C.
2. Policy TR 1.4.1 Roadway Functional Classification
 - Aligns City classifications with federal/regional functional classifications

Additions to this element would promote coordination, funding efficiency and safety.

Table 5.4-1 provides a summary of all specific policy additions and modifications proposed as part of the 2003 Burien Plan update. In total, 26 new and 18 modified Burien Plan policies are proposed. Tables 5.4-2 and 5.4-3 provide a list of the 13 proposed Comprehensive Plan Land Use and four Zoning map amendments. The proposed map amendments are citizen-initiated changes that would not affect the general land use direction of the Burien Plan.

TABLE 5.4-1. PROPOSED COMPREHENSIVE PLAN UPDATE / ANNUAL DOCKET ITEMS

PROPOSED AMENDMENTS	Initiated by
Docket Items	
Ref No. 2001-6 – Proposed addition of Planning Commissioners who worked on 1997 Plan to acknowledgements page.	City Council
Ref No. 2000-2.d, 3.g – Based on a review of existing housing policies (such as accessory dwelling units, home occupations, senior housing, clustered housing, manufactured housing, and owner-occupied housing) 3 policy modifications and 1 new policy are proposed for the housing element. Refer to Housing Element section below.	Staff
Ref No. 2000-3.a – Based on a review of existing Industrial land use policies, language changes are proposed to update policy discussions associated with Special Planning Area 4. No significant changes to industrial policies are proposed.	Citizen
Ref No. 2001-2.b – Based on a review of existing environmental policies in the Land Use and Storm Water Elements, policy revisions that promote the Endangered Species Act are proposed. For specific details, refer to Land Use and Stormwater Elements below.	Staff
Land Use Element	Staff
New Policies	
Policy LU 1.11 The City of Burien designates downtown Burien and its surrounding residential and employment areas as an urban center in accordance with the King County Countywide Planning Policies. The boundaries of the urban center are shown on Map 2-LU 1.1.	
Policy EV 1.8 The City encourages and promotes the use of Best Available Science for protecting critical areas within the community pursuant to the Growth Management Act [RCW 36.70A.172(1)].	
Policy EV 1.9 Encourage minimizing the amount of impervious surfaces in new development through the use of appropriate low-impact development techniques and removing paved areas or using retrofit options in existing developments, where applicable, to minimize runoff.	
Policy EV 2.15 Educate the public on water quality issues and impacts of stormwater flow.	
Policy EV 2.16 Educate individuals and households about different ways to reduce pollution.	
Policy DB 1.27 Make Downtown Burien the preferred site for locating city and other governmental buildings.	
Updated Policies	
A proposed terminology change from “sensitive areas” to “critical areas” is proposed throughout the document.	
Policy EV 2.10 The City shall encourage an increase in tree canopies through the addition and the preservation of existing vegetation and use of landscaping as an integral part of development plans.	
Policy EV 5.3 The City shall protect ground water recharge by promoting low-impact development techniques that infiltrate runoff where site conditions permit, except where potential groundwater contamination cannot be prevented by pollution source controls and stormwater pretreatment.	

PROPOSED AMENDMENTS	Initiated by
Community Character Element	Staff
Updated Goal and Policies	
Goal DB.1 Enhance the distinctive character and viability of downtown Burien, and reinforce it as the focal point of the community by encouraging the implementation of the Conceptual Framework for the Town Square, the Downtown Master Plan, and the following downtown policies.	
Policy VQ 1.4 The construction of new billboards and large signs shall be prohibited <u>limited</u> to reduce visual clutter, enhance traffic safety and maintain views of mountains, Puget Sound, and community features. Existing billboards and large signs shall be amortized.	
Policy DB 1.15 [Figure DB1.15 provides a general illustration of streetscape aesthetic components the City encourages Downtown.]	
Housing Element	Staff
New Policy	
Policy HS 1.20 The City should create a Demonstration Housing Program to test innovative residential designs that would encourage affordable housing production. The pilot program should test alternative development standards that increase the diversity of housing types and levels of affordability.	
Updated Policies	
Policy HS 1.8 The City's <u>affordable</u> housing strategy shall place highest priority on conserving <u>and improving</u> the City's existing housing stock. The City should accomplish this through code enforcement, appropriate zoning, and participation in housing rehabilitation programs.	
Policy HS 1.9 The City's strategy for providing "affordable housing" shall mainly rely on protecting the quality and supply of the existing housing stock in Burien's neighborhoods.	
Policy HS 1.12 Existing mobile home parks in the City provide an important affordable housing choice for low-income residents and should be protected <u>from closures without adequate relocation plans</u> . The City should ensure that sufficient relocation plans are in place prior to a closure of a mobile home park any housing that serves low-income residents.	
Transportation Element	Staff
<i>Streamlined Policy Document with Following Updates:</i>	
New Policies and Objectives	
Policy TR 1.1.4 The City should consider multimodal transportation alternatives and land use coordination when feasible.	
Policy TR 1.1.5 The City should consider mobility options (transit use, high-occupancy vehicles, demand management actions, access to transit and nonmotorized transportation modes, consistent with Commute Trip Reduction Act requirements) in relation to level of service standards and to relieve congestion.	
Policy TR 1.2.1 The City shall explore the development of a concurrency ordinance.	
Policy TR 1.3.2 The City should encourage driveway sharing, where possible.	
Policy TR 1.4.2 When involved with any roadway improvements or transportation funding issues, the City shall also refer to the most recent U.S. Department of Transportation/Washington State Department of Transportation/King County <u>Functional Classification of Public Roads</u> map (Seattle-Everett Urban Area).	
Policy TR 2.1.1 The City should conduct an annual review of accidents and accident locations in Burien, and place high priority on those locations with relatively higher numbers of vehicle or pedestrian/bicycle accidents.	
Objective TR 2.3 Coordinate transportation improvements and plans with the Burien Fire Department and Burien Police Services.	

PROPOSED AMENDMENTS	Initiated by
Policy 3.1.4 The City shall coordinate with the City of SeaTac and the Port of Seattle regarding roadway improvements related to land use changes in the Northeast Redevelopment Area (NERA) including Des Moines Memorial Drive and 8 th Avenue South.	
Objective TR 4.2 In coordination with King County METRO, (1) work to relocate the Burien Transit Center on the Burien Park & Ride lot, and (2) promote the development of the Burien Park & Ride as a Transit Oriented Development (TOD) with uses that support Burien's vision for the downtown area and Town Square.	
Objective TR 4.5 Coordinate with Sound Transit, Seattle Monorail Project, or other agencies to explore the development of commuter/light rail or elevated transportation in Burien.	
Objective TR 6.1 Coordinate with transit service providers to ensure accessibility to all transit facilities and services.	
Objective TR 7.2 Promote a transportation system that minimizes impacts on natural drainage patterns and protects water quality.	
Policy TR 7.2.1 The City shall coordinate with the Stormwater Master Plan regarding low impact development, particularly as related to transportation infrastructure. The City should explore surface water management strategies that minimize impervious surfaces and incorporate landscaping that works to reduce runoff.	
Objective TR 8.3 Pursue the development of a traffic impact fee program, as well as other financial mechanisms that ensure new development contributes to the mitigation of transportation impacts related to growth.	
Updated Policies	
Policy TR 1.1.2 The City adopts the following Level-of-Service standards: LOS standard E for First Avenue South; LOS standard D within the urban center boundary, as shown in Figure 2LU-1.11, and for the intersection of SW 128th Street and Ambaum Boulevard SW; and LOS C for all other roadway facilities and services.	
Policy TR 1.1.3 As mandated by state law, the City of Burien adopts LOS of "D" for SR-509 and SR-518 (highways of statewide significance) and LOS of "E" for the segment of SR-509 from First Avenue South to Burien City Limits (highway of regional significance), or whichever LOS is currently adopted by the Washington State Department of Transportation.	
Policy TR 1.4.1 The City's adopted functional classification system shall be as shown on Figure 2-TR1.4.	
Utilities Element	Staff
New Policy	
Policy UT 1.16 The City should actively work with water utility service providers to ensure that areas of low water flow are upgraded to ensure that adequate service is provided. In addition adequate water service shall meet acceptable minimum requirements for the provision of emergency fire response services.	
Parks, Recreation, and Open Space Element	Staff
Updated Goal	
Goal PRO.1 Develop a well-maintained, interconnected system of multi-functional parks, recreation facilities and open spaces that is attractive, safe and available <u>accessible for all geographic regions and population segments of the City's population within the City</u> , and supports the community's well-established neighborhoods and small town atmosphere.	

PROPOSED AMENDMENTS	Initiated by
Storm Water Element	Staff
New Policies	
Policy ST 2.9 The City shall not convert any pervious residential driveways to impervious surfaces following completion of a stormwater improvement or capital improvement project, unless the residential driveway was impervious prior to the commencement of the project.	
Policy ST 2.10 Increase the overall coverage of tree canopies <u>and other vegetation</u> in the City by encouraging new site development and retrofit plans to include provisions for the addition or preservation of trees and vegetation.	
Policy ST 2.11 Implement a public education program <u>encouraging homeowners to use development modifications to reduce stormwater impacts. The program should to</u> distribute materials to the community or conduct outreach activities about the impacts of stormwater discharges on water bodies and the steps the public can take to reduce pollutants in stormwater runoff.	
Policy ST 2.12 The public shall be involved in creating, implementing, and updating the storm/surface water management program. Municipalities should make efforts to reach out and engage all economic and ethnic groups.	
Policy ST 2.13 The City shall enforce a program to detect and eliminate illicit discharges into the city's stormwater system, including illegal dumping to the system.	
Policy ST 2.14 Develop and implement an operation and maintenance program that includes a training component and has the ultimate goal of preventing or reducing pollutant runoff from municipal operations.	
Updated Goal and Policies	
<p>Goal ST.1 Manage stormwater runoff in such a manner as to:</p> <ul style="list-style-type: none"> • protect steep slopes, streams, wetlands and shorelines from erosion and sedimentation to avoid the degradation of environmental quality, wildlife habitat, and natural system aesthetics; • <u>preserve, protect, and restore natural habitat critical for the conservation of salmonid species listed under the federal ESA;</u> • protect the quality of surface water and groundwater; • provide recharge of groundwater where appropriate; and • ensure natural control mechanisms are preferred, where appropriate. 	
<p>Policy ST 1.1 ... This Plan shall: ...</p> <p>c. Provide for the long-term protection and restoration of Miller Creek <u>Basin</u> as a viable fish habitat and a natural amenity for the urban area. <u>Require higher detention and water quality standards for development within this basin because it supports a federally listed species.</u></p> <p>d. Provide long-term protection and restoration of Salmon Creek Basin <u>downstream of Ambaum Boulevard SW from Salmon Creek ravine to Puget Sound</u> as a viable fish habitat and a natural amenity for the urban area. <u>Require higher detention and water quality standards for development within this basin because it supports a federally listed species.</u></p> <p>e. <u>Encourage developers to incorporate into site planning various environmentally sensitive approaches to stormwater management, including low-impact development techniques, and preservation and restoration of natural landforms.</u></p>	
Policy ST 1.2 The City should encourage regional approaches to managing stormwater to provide improved performance, maintenance and cost efficiency. <u>Land should be acquired that is adequate for the development of regional detention and water quality facilities.</u>	

PROPOSED AMENDMENTS	Initiated by
<p>Policy ST 1.4 Stormwater retention/detention facilities may be allowed to be used as partial fulfillment of open space requirements, where the facility provides significant recreation and open space amenities. In determining the degree to which this is allowed, consideration shall be given to the nature of the development. Where the development is non-residential, a greater percentage may be allowed for fulfillment. Commercial development shall should be encouraged to make retention/detention facilities part of a more extensive landscaping. These facilities should be designed as an amenity, particularly in commercial developments, and to ensure the safety of its users.</p>	
<p>Policy ST 1.6 Development shall be designed and constructed to minimize disruption and/or degradation of natural drainage systems and the habitat they provide, both during and after construction. Development design which minimizes impervious surfaces <u>through the use of appropriate low-impact development techniques, such as by limiting site coverage and maximizing the exposure of natural surfaces for the infiltration of water</u> shall be required <u>should be encouraged</u>.</p>	
<p>Policy ST 1.7 Stormwater shall should be detained and infiltrated on-site where possible. If on-site detention and infiltration is not possible, stormwater shall <u>should</u> be detained so that the release rate shall be as close to <u>is equal to or less than</u> predevelopment or natural conditions as possible. Any release must be to an approved drainage system, either natural or constructed, as approved by the City.</p>	
<p>Policy ST 1.8 As part of its review process, the City shall consider the impacts of stormwater runoff from new development on the City's natural drainage systems, and require any appropriate mitigating measures. When redevelopment occurs, and the amount of impervious surface increases, the City shall <u>should also consider requiring retrofitting existing development to be retrofitted with stormwater management facilities when redevelopment occurs and the amount of impervious surface increases</u>. Criteria for implementing this policy should also be developed using a threshold approach patterned after SEPA requirements.</p>	
<p>Pol. ST 1.10 In the interest of the residents of Burien, the Puget Sound area and adjoining communities, the City will protect the quality of surface water bodies <u>that are located within drainage basins of in</u> the City.</p>	
<p>Policy ST 1.11 The City will encourage all City residents and <u>require</u> businesses to implement Best Management Practices to prevent erosion and sedimentation from occurring, and to prevent pollutants from entering ground or surface waters <u>to maintain natural aquatic communities and beneficial uses</u>.</p>	
<p>Policy ST 1.13 The City shall incorporate facilities <u>such as detention ponds, bioswales, wetlands, and other natural drainage facilities</u> to improve the water quality of surface water runoff from existing and new roadway improvements.</p>	
<p>Policy ST 2.1 Appropriate stormwater management practices shall <u>should</u> be employed to prevent stormwater problems from urban runoff, which may include flooding, erosion, or stream channel scouring in natural drainage systems. These practices at a minimum should include the collection, control and treatment of storm water runoff at a rate and quantity that will prevent damage to both man-made and natural drainage systems. One or a combination of the following <u>three</u> approaches can be used to managed excessive storm water runoff:</p> <p>c. <u>Repair/retrofit private storm drainage lines that route City stormwater to prevent damage to both man-made and natural drainage systems.</u></p>	

PROPOSED AMENDMENTS	Initiated by
<p>Policy ST 2.2 ...The following guidelines shall be used to develop stormwater quantity and quality standards within the City:</p> <p>a. <i>Multifamily and Moderate Density Single Family Neighborhoods:</i> The City shall require new development, as well as redevelopment projects involving external construction that may have drainage implications, to comply with full urban stormwater drainage standards that include culverts, pipes, gutters, and detention/retention and water quality treatment facilities. <u>Seek to implement stormwater management, including low-impact development standards, which require all development proposals to establish systems, preferably natural, for filtering the "first flush" (delivery of disproportionately large amounts of pollutants which occur during the early stages of the storm) of urban runoff near its source.</u> The standards should also address maximum impervious lot coverage. Where appropriate, the Director of Public Works may modify these standards but only to the extent that runoff quantity and quality levels are maintained....</p> <p>c. <i>Low Density Single Family Neighborhoods:</i> The City shall allow low-impact development techniques "modified urban standards" that are appropriately designed to match the character of adjacent land uses, such as allowing well designed, open drainage systems <u>which increase the amount of infiltration of rainfall as it occurs, as opposed to rather than gutters and pipes which do not provide infiltration.</u> (Facilities on arterials in these areas may require full urban stormwater drainage standards.)</p>	
<p>Policy ST 2.6 Stormwater conveyance systems for proposed projects must be analyzed, designed and constructed to accommodate stormwater runoff originating off-site that are conveyed onto the project site, as well as runoff from the project itself. <u>Encourage the use of semi-pervious or pervious surfaces, and other low-impact development techniques to and</u> ensure that stormwater discharge from the site occurs at the natural location.</p>	

Note: This table has been updated from the November 2003 Final EIS Addendum to reflect the final policies adopted by the City Council in December 2003. Updates to this table do not change the impact discussions of the Addendum.

Table 5.4-2. Comprehensive Plan Land Use Map Changes from Docket

Map Ref. No.	Proposed Comprehensive Plan land use map Amendments	Purpose	Parcel NOs.
1	Three parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space adjoining Salmon Creek Ravine Open Space	374600-0005 374600-0200 374600-0225
2	Two parcel change from Intersection Commercial to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space on Ambaum Blvd.	374600-0811 374600-0970
3	Four parcel change from High Density Multi-Family to Moderate Density Single-Family	Citizen initiated (see Docket Item No. 2001 1.a)	182304-9148 182304-9024 182304-9163 182304-9164
4	One parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space adjoining Seahurst Park	547020-1265
5	One parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space adjoining Seahurst Park	547020-1455
6	One parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space adjoining Seahurst Park	132303-9012
7	One parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space adjoining Seahurst Park	132303-9012
8	One parcel change from Moderate Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land adjacent to the Community Center	192304-9192
9	One parcel change from Office to Regional Commercial	Citizen initiated (see Docket Item No. 2002-1)	144640-0255
10	One parcel change from Low Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space. (Eagle Landing Park)	Missing Parcel Numbers
11	Two parcel change from Moderate Density Single-Family to Public Parks/Schools/Recreation/Open Space	City purchased land for public park and open space	176060-0125 176060-0176
12	One parcel change from Community Commercial to Moderate Density Single-Family	Citizen initiated (see Docket Item No. 2001 1.f)	302304-9373
13	Five parcel change from Moderate Density Single-Family & Industrial to Public Parks/Schools/Recreation/Open Space	City Staff initiated (see Docket Item No. 2001-3)	322304-9070 322304-9094 322304-9173 322304-9183 322304-9184

Source: City of Burien 2003.

Table 5.4-3. Zoning Map Changes from Docket

Map Ref. No.	Proposed Zoning Map Amendments	Purpose	Parcel NOs.
1	Four parcel change from High Density Multi-Family to Moderate Density Single-Family	Docket Item No. 2001 1.a: Citizen initiated	182304-9148 182304-9024 182304-9163 182304-9164
2	One parcel change from Office to Regional Commercial	Docket Item No. 2002-1: Citizen initiated	144640-0255
3	One parcel change from Community Commercial to Moderate Density Single-Family	Docket Item No. 2001 1.f : Citizen initiated	302304-9373
4	Five parcel change from Moderate Density Single-Family & Industrial to Public Parks/Schools/Recreation/Open Space	Docket Item No. 2001-3: City Staff initiated	322304-9070 322304-9094 322304-9173 322304-9183 322304-9184

Source: City of Burien 2003.

Scope of Environmental Review

This environmental review is programmatic in nature; no specific physical development would occur as part of the proposed action. Future project-specific development activities within areas affected by the proposal would undergo a separate and independent project-level environmental review process as required under SEPA.

The 1997 EIS and 1997 FEIS Addendum collectively analyzed the impacts of five different alternative development patterns. Each of these alternatives included a range of additional growth and policy variations to compare against the Preferred Community alternative. The scoping process for this addendum consisted of a thorough review of the EIS alternatives and the potential effects of proposed changes to the Burien Plan on the physical environment. This included a brainstorming session with environmental consultants and City staff, consideration of Planning Commission guidance, and public comments received throughout the Burien Plan update process. All components of the natural and built environment were considered, including: earth, air, surface and groundwater, noise, plants and animals, energy, public services, transportation. It was determined that environmental impacts of the proposed Burien Plan update are generally captured by the analyses prepared for the Preferred Community, the Thriving Community, and No Action Alternatives evaluated in the 1997 Draft EIS. However, the proposed action may result in additional impacts associated with the following elements of the environment:

- Land Use
- Consistency with Plans and Policies
- Transportation

These environmental parameters are the subject of further analysis in this Addendum. Implementation of the Burien Plan update is not anticipated to bear on any other environmental elements.

5.4.3 Environmental Analysis

The following sections provide a discussion of potential impacts to land use, land use plans and policies, and transportation systems that could result from the proposed Burien Plan update. An evaluation of potential mitigation measures follows this discussion. (For a detailed review of the existing conditions of each element, please refer to the updated Chapter 4 of the proposed 2003 Burien Plan.)

Land Use

The following sections address potential land use issues associated with new or refined policies proposed as part of the proposed Burien Plan update.

Urban Center Designation

The proposed Land Use policy LU 1.11 would designate the Downtown as an “Urban Center” for the region. An “Urban Center” is defined by the King County Countywide Planning Policies (CPPs) as an area for focused growth and a hub for high capacity mass transit. Currently, there are 23 designated Urban Centers within the four-county region. To be designated an Urban Center, the area must meet the following criteria:

- Land area must be between 0.5 and 1.5 square miles;
- Areas must be located so that all portions of the Urban Center are within a ½ mile walking distance of a transit center;
- Must contain an existing minimum density of 50 jobs per gross acre;
- Must contain an existing minimum residential density of 15 households per gross acre; and
- Must provide the potential to support a minimum of 15,000 jobs within a ½ mile walking distance of a transit center.

The proposed Urban Center boundary includes the downtown, portions of the community commercial area along Ambaum to about 144th Street, the multifamily residential area west of the Downtown near Lake Burien, Old Burien, the large multifamily area to the south of the Downtown, part of the regional commercial strip and the Gateway area to the north (see Figure 2 LU_1.11). Burien’s existing employment and housing density within this boundary and the existing location of the transit center downtown meet the physical criteria for an Urban Center designation. Recent planning efforts conducted to date on the downtown and Town Square project have provided the regulatory framework to meet the remaining criteria. In addition, the proposed Burien Plan update contains policies that encourage compact mixed-use development that would support an Urban Center within the downtown.

The primary reason for designating the downtown as an Urban Center is to help the City qualify for future state and regional transportation funds. Because no further changes to Burien’s Comprehensive Plan Land Use and Zoning maps or development code is needed to qualify, the proposed policy is not anticipated to result in impacts not already addressed in previous environmental review (1997 EIS and Addendum and the 2003

Transportation Study). Establishing this policy would accelerate the implementation of the designated Comprehensive Plan Land Use by further encouraging compact mixed-use development in the City center. This type of development would attract additional commercial and public activities over time, thereby incrementally increasing traffic, noise, light, and pedestrian movements. (The proposed Transportation Element update addressed a potential build-out scenario of the City's land use configuration, including the Burien Town Square project and Special Planning Area 4, by estimating traffic volumes to the year 2020. Refer to Section 4.3 for further details.) This type of development would generally improve the economic base of the City.

Future project-specific environmental review within the proposed Urban Center designation would be conducted as development occurs. However, the City is currently exploring other alternatives to project-specific analysis, such as a Planned Action SEPA review of the Downtown district and/or the exemption for urban infill projects allowed by RCW 43.21C.229. This phased environmental review approach would further streamline development in this area.

It is important to note that in order for the proposed Urban Center designation to be meaningful, it must be officially recognized by the region. The Growth Management Planning Council (GMPC) must formally amend the CPPs to add downtown Burien as a designated Urban Center. Subsequently, the Growth Management Planning Board of the PSRC must make a final recommendation of support for this policy addition to the full Executive Board.

Buildable Lands

Proposed modifications to specific Environmental and Storm Water policies (EV 1.8, ST 1.1, and ST 1.6) would require the use of Best Available Science for protecting critical areas and manage storm water to preserve, protect, and restore natural habitat critical for the conservation of salmonid species. In addition, higher detention and water quality standards for development within the Miller Creek basin would be required. In general, these policies would benefit natural habitats within the City by encouraging proactive development methods to protect critical areas. In short, these policies discourage encroachment on critical areas and could result in a reduction of buildable area on parcels adjacent to designated critical areas if critical area buffer widths were to increase. Therefore, the City has provided some flexibility in the Critical Areas Ordinance by allowing buffer width averaging and providing property owners the option of decreasing buffers by 25 percent where enhancements benefiting fish and wildlife are made. This provision is also proposed for the Stream regulations. Therefore, no significant impact to the existing amount of developable land is anticipated.

Land Use / Zoning Changes

Proposed modifications to the Comprehensive Plan Land Use and Zoning maps (Table 3-2) were evaluated for land use compatibility with adjacent parcels. In general, the parcel(s) where proposed land use designation/zone changes would occur are primarily located on the edge of a designation/zone and would be changed to reflect the adjacent district. The existing land use pattern within the City would not be significantly affected,

although changes to these parcels would allow higher intensity uses in some cases, and lower intensity uses in others. No physical changes would occur as a part of the proposed action. Project-specific activities that occur on these parcels in the future would undergo a separate and independent SEPA review. The proposed map adjustments are internally consistent with the Comprehensive Plan and the GMA and would continue to support the community's vision.

Aesthetics

Proposed policy modification VQ 1.4 would limit (rather than prohibit) the construction of new billboards and large signs to reduce visual clutter, enhance traffic safety and maintain views of mountains, Puget Sound, and community features. In short, the City would generally discourage this type of signage throughout the City, although it would no longer be against City policy to post large obtrusive signage. In addition, it is no longer City policy to amortize existing billboards and large signs.

Revising this policy would establish consistency between the Burien Plan and the Sign Ordinance (No. 359) passed on July 15, 2002. The signage ordinance currently provides incentives to billboard owners to remove existing billboards in key view corridors in exchange for locations where important views would not obstructed. This incentive program could result in reduced clutter along the 1st Avenue SW view corridor. In turn, it may also increase the number of billboards and visual detractions along roadways without views.

Consistency with Plans and Policies

Washington State Growth Management Act

The Growth Management Act (GMA), first enacted as ESHB 2929 by the 1990 Washington State legislature and subsequently amended, contains a comprehensive framework for managing growth and coordinating land use planning with the provision of adequate infrastructure. Among other requirements, jurisdictions subject to GMA must prepare and adopt: county-wide planning policies for implementation of the Act; comprehensive land use plans containing specified elements and embodying state-wide goals; regulations consistent with those plans; capital facilities plans (including financial elements) for utilities and transportations systems; and programs designating and regulating critical/sensitive areas (including agricultural and forest lands, wetlands, steep slopes, and critical habitat). Many provisions of GMA apply to the state's largest and fastest growing jurisdictions, including King County and all its cities; some provisions of GMA (such as requirements to identify and regulate critical areas) apply to all local jurisdictions.

Comprehensive Plans and regulations must be updated every seven years to address new amendments to GMA, new laws, and changes in conditions (population, employment, traffic counts, etc.). The update can also reflect the City's progress on achieving the community's vision [RCW 36.70A.130(4)]. While updates can be done on a continuing basis, they must occur in a deliberate manner every seven years. The schedule for when the first update must be completed for the cities within King County is December 1,

2004, as allowed by SS Bill 5841. State funds cannot be accessed if a city is out of compliance with GMA, which includes review and update requirements.

This deliberate GMA Update process includes review of the four following areas:

1. Changes to the Growth Management Act (1995 – 2002)
2. New Laws / Events / Endangered Species Listings
3. Changes in Conditions / Monitoring Progress
4. Strengthening Existing Policies (not required)

The Growth Management Act also authorizes the City of Burien to amend its Comprehensive Plan on an annual basis. On January 14, 2003 the Planning Commission made a recommendation to the City Council on which proposals would be considered on this year's Comprehensive Plan Amendment Docket. These include the remaining amendments from the City's 1998 to 2003 dockets.

Discussion: Adoption of the proposed action would fulfill the seven-year update requirement of the GMA prior to the December 1, 2004 deadline. The deliberate GMA Update process included the establishment of a public participation program that identifies procedures and schedules for the review, evaluation, and possible revision process, and evaluation of relevant plans and local, state, and federal legislation.

The amendments considered under the 7-Year Update and the docketed items were reviewed for consistency with GMA, support of the community's vision, and internal consistency with other policies in the Comprehensive Plan. Proposed amendments would establish new or modified policies that encourage the following:

- Urban Centers
- Housing Demonstration Program
- Best Available Science
- Preservation of Critical Areas
- Low Impact Development

The proposed action is consistent with the GMA as identified in the GMA Gap Analyses prepared by the City as part of the proposed action. These analyses are on file with the City and can be viewed upon request.

Endangered Species Act

The Endangered Species Act (ESA), enacted in 1973 (16 USC 1531), requires that all federal agencies undertake programs to conserve endangered and threatened species, and such agencies are prohibited from authorizing, funding or carrying out any action that would jeopardize a listed species or destroy or modify its "critical habitat." Generally, the National Marine Fisheries Service (NMFS) deals with species occurring in marine waters and anadromous fish, while the Fish & Wildlife Service (USFWS) addresses terrestrial and freshwater species and migratory birds. In 1998, the NMFS listed Chinook Salmon and the USFWS listed bull trout as "threatened species" in the Puget Sound

region pursuant to ESA. The critical habitat for Chinook Salmon includes all marine, estuarine and river reaches accessible by Chinook Salmon in Puget Sound. This includes the Miller Creek basin which covers much of the City of Burien.

In 1995, the Washington legislature added a new section to the GMA to ensure that counties and cities consider reliable scientific information when adopting policies and development regulations to designate and protect critical areas. The new GMA section (RCW 36.70A.172) requires that critical area code updates incorporate the best available science (BAS) to protect the functions and values of critical areas. The GMA does not define BAS, but the Washington Office of Community Development adopted regulations in 2000 that provided clarification (WAC 365-195-900).

In addition, GMA requires that special consideration be given to the protection of salmonids. Anadromous fish and all salmonids are given special consideration due to, in part, to the recent federal listing of certain salmonids in the Puget Sound area under the Endangered Species Act (ESA).

Discussion: The City of Burien has added four new environmental policies to the Land Use Element of the Burien Plan (refer to Table 3-1). These policies promote protection and enhancement of critical areas in compliance with the ESA. The Burien Municipal Code regulations should be based on these goals and policies.

The City has recently completed the process of revising the Sensitive Areas Ordinance using Best Available Science (Ordinance 394, Adopted October 2003). The new ordinance, renamed as the “Critical Areas Ordinance” (CAO), is generally consistent with the existing ordinance and contains few substantive changes. Modifications include: 1) limits on certain activities and land uses from developing within or adjacent to Critical Aquifer Recharge Areas, such as solid waste landfills, mining, and underground injection wells; 2) modifications to critical area buffers and mitigation; and 3) the reclassification of some streams. The proposed Burien Plan policy modifications would establish internal consistency with the City’s current CAO, implementation programs, and development regulations.

Transportation

Overview

The City has re-evaluated growth projections and the land use assumptions that were the basis of the transportation system improvements identified in the transportation element of the 1997 Comprehensive Plan. The changes in land use projections and the City’s priorities have resulted in a reassessment of the transportation system needs for the City.

The proposed update to the transportation element identifies specific strategies and programs to implement the City’s revised transportation goals and policies. It also serves as a dynamic planning tool for developing a balanced transportation system that promotes economic growth and development by means of an efficient, yet cost-effective program. This element serves as a comprehensive, policy-based document that contains analysis of existing and future transportation conditions. The update consists of the following: an

inventory of existing transportation facilities and services; travel forecasting based on land use planning; transportation planning, goals, and policies; transportation capital improvement program; and financing programs and implementation strategies. The update addresses the overall transportation needs for a range of travel modes.

As required by the GMA, the proposed transportation element update includes a revised long-range forecast of future traffic volumes. The update is based on a 20-year horizon to maintain consistency with the land use element of the City's Comprehensive Plan and the Puget Sound Regional Council Destination 2030 transportation plan. The analysis of existing transportation system conditions, in conjunction with analysis of the 2020 planning horizon, provides the City with a response to its most immediate short-term transportation needs, as well as defining needed longer-range transportation improvements through a revised transportation improvement program. Transportation projects included in the program provide system capacity to support growth within the City, improve the safety of the transportation system, preserve the existing transportation system, and support economic development of the City.

The City is also preparing a separate, integrated, non-motorized transportation/recreation plan focusing on pedestrian and bicycle connections within the City. The Pedestrian and Bicycle Facilities Plan were separated from the broader transportation element to provide more emphasis to those priorities and implement Burien's Vision and Comprehensive Plan goals. Therefore, this update does not include changes or additions to the non-motorized portions of the transportation element, which will be addressed through this separate planning effort.

Level of Service Standard

The proposed revision of the Transportation Element added six new policies and included two major revisions to existing policies of the 1997 Burien Plan (refer to Table 3-1) and meets the requirements set forth by the GMA. Proposed policy TR 1.1.2, the most significant policy modification, would result in a reduction in the transportation level of service standards for 1st Avenue South from "D" to "E". All roadways in the Urban Center boundary would change from "C" to "D". The intersection of Ambaum Boulevard and SW 128th Street also change to a LOS of "D". The remainder of the City's roadways remain at a level of service "C".

LOS functions as a tool to qualitatively measure the operational conditions of the transportation system. LOS values range from LOS A to F. LOS A indicates free-flow traffic with little or no delay while LOS F indicates extreme congestion with lengthy delays. At signalized intersections, LOS is defined in terms of average delay per vehicle. The procedure also calculates a volume-to-capacity (v/c) ratio; a v/c ratio of 1.0 or greater represents an intersection at capacity. At un-signalized intersections, LOS is measured in terms of the reserve (or unused) capacity available for critical turning movements. LOS D is considered acceptable by regional standards on collector arterials and lower classification streets.

The proposed transportation plan update includes preparation and analyses of travel forecasts through the year 2020. The forecasts were developed using a travel demand model, which estimates the level of traffic volumes associated with the potential maximum build out of land pursuant to development regulations. According to the study and personal communications with Larry Toedli of The Transpo Group (October 23, 2002), all future intersection levels of service to the year 2020 (except 1st Avenue S.) are expected to remain at LOS C once planned improvements are implemented. The reduction in LOS on City roadways is not expected to affect existing traffic circulation or result in additional congestion. The City proposes to reduce the LOS from C to D only to provide budget flexibility associated with concurrency requirements for unanticipated future developments. In turn, this policy could result in increased traffic delays proximate to locations where future unanticipated development occurs. Ambaum Boulevard SW may be the most susceptible to this type of impact.

The proposed LOS change from “D” to “E” along 1st Avenue S. would allow traffic congestion and delays to increase along this arterial without required transportation improvements otherwise mandated by concurrency regulations under the GMA. The City proposes to reduce the LOS along 1st Avenue S so as not to preclude compact, mixed-used development encouraged under proposed Policy LU 1.11, which would establish the City of Burien as a regional Urban Center (refer to Land Use Section 4.1), and downtown planning efforts. Redevelopment of the downtown would improve the economic viability of the City and provide additional jobs and housing for residents.

It should be noted that the proposed transportation improvement program associated with the Transportation Element plans for improvements to State Route 509 and intersections at 1st Avenue S and SW 160th, SW 148th, and SW 128th Streets. These improvements have been prioritized to improve existing transportation flow and reduce potential impacts to the transportation system from future downtown development.

Roadway Functional Classifications

The proposed transportation element updates the roadway functional classification system of the City’s roadways (Figure 2-TR1.4). The existing Burien street standards were modified to coordinate them with federal, state, and regional classification systems and to ensure consistent development and usage of roadways. The City would be eligible for potential federal, state, or regional funding opportunities for transportation improvements under these new standards. Because the proposed system is similar in nature to the existing street standards, no significant impacts are expected.

Mitigation Measures

In general, the proposed action would amend the existing Burien Plan to enhance the protection of critical areas, encourage low-impact development and affordable housing, and focus redevelopment of the downtown by designating it as an Urban Center. Proposed level of service standards for transportation systems in the community have been modified to be consistent with these efforts. Impacts resulting from the proposed action can be appropriately mitigated by existing City regulations, Comprehensive Plan

policies, and applicable mitigating measures adopted for the Preferred Community Alternative in the 1997 FEIS and Addendum. Therefore, no further mitigation is necessary or proposed.

5.4.4 Conclusions

The environmental analysis addresses environmental impacts with emphasis on land use compatibility, consistency with plans and policies, impacts to transportation, utilities, and capital facilities. In general, the proposed action could accelerate redevelopment of the downtown and implementation of the Burien Vision. Land use and transportation impacts resulting from the proposed action can be appropriately mitigated by existing City regulations, Burien Plan policies, and applicable mitigating measures adopted for the Preferred Community Alternative in the 1997 EIS.